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— *See* Zarley, J. H., Britigan, B. E., and Wilson, M. E.

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Brodeur, G. M. *See* Hailat, N., Keim, D. R., Melhem, R. F., Zhu, X.-x., Eckerskorn, C., Brodeur, G. M., Reynolds, C. P., Seeger, R. C., Lottspeich, F., Strahler, J. R., and Hanash, S. M.

Broekman, M. J. *See* Marcus, A. J., Safier, L. B., Hajjar, K. A., Ullman, H. L., Islam, N., Broekman, M. J., and Eiroa, A. M.

Broide, D. H., and Firestein, G. S. Endobronchial allergen challenge in asthma. Demonstration of cellular source of granulocyte macrophage colony-stimulating factor by in situ hybridization. 1048.

Brooimans, R. A., Stegmann, A. P. A., Van Dorp, W. T., Van der Ark, A. A. J., Van der Woude, F. J., Van Es, L. A., and Daha, M. R. Interleukin 2 mediates stimulation of complement C3 biosynthesis in human proximal tubular epithelial cells. 379.

Brookshire, C. A. *See* Bunchman, T. E., and Brookshire, C. A.

Brouet, J.-C. *See* Levy, Y., Tsapis, A., and Brouet, J.-C.

Brown, E. J. *See* Gresham, H. D., Graham, I. L., Anderson, D. C., and Brown, E. J.

Brown, T. R., Sundick, R. S., Dhar, A., Sheth, D., and Bagchi, N. Uptake and metabolism of iodine is crucial for the development of thyroiditis in obese strain chickens. 106.

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Buhl, R. *See* Jaffe, H. A., Buhl, R., Mastrangeli, A., Holroyd, K. J., Saltini, C., Czerski, D., Jaffe, H. S., Kramer, S., Sherwin, S., and Crystal, R. G.

Buja, L. M. *See* Shaul, P. W., Kinane, B., Farrar, M. A., Buja, L. M., and Magness, R. R.

Büller, H. R. *See* Levi, M., Hack, C. E., de Boer, J. P., Brandjes, D. P. M., Büller, H. R., and ten Cate, J. W.

Bunchman, T. E., and Brookshire, C. A. Cyclosporine-induced synthesis of endothelin by cultured human endothelial cells. 310.

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Bunton, L. A. *See* Graham, B. S., Bunton, L. A., Wright, P. F., and Karzon, D. T.

Burch, R. M., and Mahan, L. C. Oligonucleotides antisense to the interleukin 1 receptor mRNA block the effects of interleukin 1 in cultured murine and human fibroblasts and in mice. 1190.

Buresh, C. M. *See* Alexander, H. R., Sheppard, B. C., Jensen, J. C., Langstein, H. N., Buresh, C. M., Venzon, D., Walker, E. C., Fraker, D. L., Stovroff, M. C., and Norton, J. A.

Burlingame, R. W., and Rubin, R. L. Drug-induced anti-histone autoantibodies display two patterns of reactivity with substructures of chromatin. 680.

Burnett, J. C., Jr. *See* Margulies, K. B., Perrella, M. A., McKinley, L. J., and Burnett, J. C., Jr.

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Buse, M. G. *See* Block, N. E., Menick, D. R., Robinson, K. A., and Buse, M. G.

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Byrd, P. K. *See* Curtis, J. L., Byrd, P. K., Warnock, M. L., and Kaltreider, H. B.

Byrd, T. F., and Horwitz, M. A. Lactoferrin inhibits or promotes *Legionella pneumophila* intracellular multiplication in nonactivated and interferon gamma-activated human monocytes depending upon its degree of iron saturation. Iron-lactoferrin and nonphysiologic iron chelates reverse monocyte activation against *Legionella pneumophila*. 1103.

—, **Horwitz, M. A.** Chloroquine inhibits the intracellular multiplication of *Legionella pneumophila* by limiting the availability of iron. A potential new mechanism for the therapeutic effect of chloroquine against intracellular pathogens. 351.

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Capasso, G., Unwin, R., Agulian, S., and Giebisch, G. Bicarbonate transport along the loop of Henle. I. Microperfusion studies of load and inhibitor sensitivity. 430.

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Carlos, T. M. *See* Dobrina, A., Menegazzi, R., Carlos, T. M., Nardon, E., Cramer, R., Zacchi, T., Harlen, J. M., and Patriarca, P.

Carré, P. C., Mortenson, R. L., King, T. E., Jr., Noble, P. W., Sable, C. L., and Riches, D. W. H. Increased expression of the interleukin-8 gene by alveolar macrophages in idiopathic pulmonary fibrosis. A potential mechanism for the recruitment and activation of neutrophils in lung fibrosis. 1802.

Carrier, L. *See* Boheler, K. R., Carrier, L., de la Bastie, D., Allen, P. D., Komajda, M., Mercadier, J.-J., and Schwartz, K.

Carson, D. A. *See* Olee, T., Yang, P.-M., Siminovitch, K. A., Olsen, N. J., Hillson, J., Wu, J., Kozin, F., Carson, D. A., and Chen, P. P.

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Chandrashekar, R., Masood, K., Alvarez, R. M., Ogunrinade, A. F., Lujan, R., Richards, F. O., Jr., and Weil, G. J. Molecular cloning and characterization of recombinant parasite antigens for immunodiagnosis of onchocerciasis. 1460.

Chapman, P. B., and Houghton, A. N. Induction of IgG antibodies against G_{D3} ganglioside in rabbits by an anti-idiotypic monoclonal antibody. 186.

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Chelly, J., Gilgenkrantz, H., Hugnot, J. P., Hamard, G., Lambert, M., Récan, D., Akli, S., Cometto, M., Kahn, A., and Kaplan, J. C. Illegitimate transcription. Application to the analysis of truncated transcripts of the dystrophin gene in nonmuscle cultured cells from Duchenne and Becker patients. 1161.

Chen, B. *See* Snyder, L. S., Hertz, M. I., Peterson, M. S., Harmon, K. R., Marinelli, W. A., Henke, C. A., Greenheck, J. R., Chen, B., and Bitterman, P. B.

Chen, P. P. *See* Olee, T., Yang, P.-M., Siminovitch, K. A., Olsen, N. J., Hillson, J., Wu, J., Kozin, F., Carson, D. A., and Chen, P. P.

Chen, P. Y., and Sanders, P. W. L-Arginine abrogates salt-sensitive hypertension in Dahl/Rapp rats. 1559.

Chen, X. *See* Boden, G., Jadali, F., White, J., Liang, Y., Mozzoli, M., Chen, X., Coleman, E., and Smith, C.

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— *See* Myers, S. R., Biggers, D. W., Neal, D. W., and Cherrington, A. D.

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Chisari, F. V. *See* Ferrari, C., Bertoletti, A., Penna, A., Cavalli, A., Valli, A., Missale, G., Pilli, M., Fowler, P., Giuberti, T., Chisari, F. V., and Fiaccadori, F.

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Chomienne, C., Balitrand, N., Ballerini, P., Castaigne, S., de Thé, H., and Degos, L. All-*trans* retinoic acid modulates the retinoic acid receptor-α in promyelocytic cells. 2150.

Christoph, I. *See* Minotti, J. R., Christoph, I., Oka, R., Weiner, M. W., Wells, L., and Massie, B. M.

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Cicardi, M. *See* Frangi, D., Cicardi, M., Sica, A., Colotta, F., Agostoni, A., and Davis, A. E., III

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Coetzer, T. L., Sahr, K., Prchal, J., Blacklock, H., Peterson, L., Koler, R., Doyle, J., Manaster, J., and Palek, J. Four different mutations in Codon 28 of α spectrin are associated with structurally and functionally abnormal spectrin α^{V74} in hereditary elliptocytosis. 743.

Cohen, M. E., Wesolek, J., McCullen, J., Rys-Sikora, K., Pandol, S., Rood, R. P., Sharp, G. W. G., and Donowitz, M. Carbachol- and elevated Ca^{2+}-induced translocation of functionally active protein kinase C to the brush border of rabbit ileal Na^+ absorbing cells. 855.

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Connes, D. *See* Marie, P. J., de Vernejoul, M. C., Connes, D., and Hott, M.

Conover, C. A. A unique receptor-independent mechanism by which insulin-like growth factor-I regulates the availability of insulin-like growth factor binding proteins in normal and transformed human fibroblasts. 1354.

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Cooke, J. P., Rossitch, E., Jr., Andon, N. A., Loscalzo, J., and Dzau, V. J. Flow activates an endothelial potassium channel to release an endogenous nitrovasodilator. 1663.

Cooper, A. D. *See* Choi, S. Y., Fong, L. G., Kirven, M. J., and Cooper, A. D.

Corbí, A. L. *See* Laffón, A., García-Vicuña, R., Humbría, A., Postigo, A. A., Corbí, A. L., de Landázuri, M. O., and Sánchez-Madrid, F.

Corretti, M. C., Koretsune, Y., Kusuoka, H., Chacko, V. P., Zweier, J. L., and Marban, E. Glycolytic inhibition and calcium overload as consequences of exogenously generated free radicals in rabbit hearts. 1014.

Coughlin, S. R. *See* Nelken, N. A., Coughlin, S. R., Gordon, D., and Wilcox, J. N.

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Cox, R. P. *See* Fisher, C. R., Chuang, J. L., Cox, R. P., Fisher, C. W., Star, R. A., and Chuang, D. T.

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Cross, A. S., and Wright, D. G. Mobilization of sialidase from intracellular stores to the surface of human neutrophils and its role in stimulated adhesion responses of these cells. 2067.
— *See* Opal, S. M., Cross, A. S., Sadoff, J. C., Collins, H. H., Kelly, N. M., Victor, G. H., Palardy, J. E., and Bodmer, M. W.
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— *See* Hubbard, R. C., Fells, G., Gadek, J., Pacholok, S., Humes, J., and Crystal, R. G.
— *See* Jaffe, H. A., Buhl, R., Mastrangeli, A., Holroyd, K. J., Saltini, C., Czerski, D., Jaffe, H. S., Kramer, S., Sherwin, S., and Crystal, R. G.
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de Knijff, P., Van den Maagdenberg, A. M. J. M., Stalenhoef, A. F. H., Leuven, J. A. G., Demacker, P. N. M., Kuyt, L. P., Frants, R. R., and Havekes, L. M. Familial dysbetalipoproteinemia associated with apolipoprotein E3-Leiden in an extended multigeneration pedigree. 643.
Del Prete, G. F., de Carli, M., Mastromauro, C., Biagiotti, R., Macchia, D., Falagiani, P., Ricci, M., and Romagnani, S. Purified protein derivative of *Mycobacterium tuberculosis* and excretory-secretory antigen(s) of *Toxocara canis* expand in vitro human T cells with stable and opposite (type 1 T helper or type 2 T helper) profile of cytokine production. 346.
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Delp, C. *See* Parkos, C. A., Delp, C., Arnaout, M. A., and Madara, J. L.
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Demacker, P. N. M. *See* de Knijff, P., Van den Maagdenberg, A. M. J. M., Stalenhoef, A. F. H., Leuven, J. A. G., Demacker, P. N. M., Kuyt, L. P., Frants, R. R., and Havekes, L. M.
Demant, T., Bedford, D., Packard, C. J., and Shepherd, J. Influence of apolipoprotein E polymorphism on apolipoprotein B-100 metabolism in normolipemic subjects. 1490.
de Munk, G. A. W., Groeneveld, E., and Rijken, D. C. Acceleration of the thrombin inactivation of single chain urokinase-type plasminogen activator (pro-urokinase) by thrombomodulin. 1680.
Dent, J. A., Galbusera, M., and Ruggeri, Z. M. Heterogeneity of plasma von Willebrand factor multimers resulting from proteolysis of the constituent subunit. 774.
Desai, S. M. *See* Allain, J.-P., Dailey, S. H., Laurian, Y., Vallari, D. S., Rafowicz, A., Desai, S. M., and Devare, S. G.
Desnick, R. J. *See* Kanzaki, T., Wang, A. M., and Desnick, R. J.
— *See* Levran, O., Desnick, R. J., and Schuchman, E. H.
Dessauw, P. *See* Bataille, R., Chappard, D., Marcelli, C., Dessauw, P., Baldet, P., Sany, J., and Alexandre, C.
de Thé, H. *See* Chomienne, C., Balitrand, N., Ballerini, P., Castaigne, S., de Thé, H., and Degos, L.
Devare, S. G. *See* Allain, J.-P., Dailey, S. H., Laurian, Y., Vallari, D. S., Rafowicz, A., Desai, S. M., and Devare, S. G.
de Vernejoul, M. C. *See* Marie, P. J., de Vernejoul, M. C., Connes, D., and Hott, M.
Deybach, J.-C. *See* Tutois, S., Montagutelli, X., Da Silva, V., Jouault, H., Rouyer-Fessard, P., Leroy-Viard, K., Guénet, J.-L., Nordmann, Y., Beuzard, Y., and Deybach, J.-C.
Dhar, A. *See* Brown, T. R., Sundick, R. S., Dhar, A., Sheth, D., and Bagchi, N.
Dhermy, D. *See* Garbarz, M., Tse, W. T., Gallagher, P. G., Picat, C., Lecomte, M.-C., Galibert, F., Dhermy, D., and Forget, B. G.
Diaz, A. *See* AyanlarBatuman, O., Ferrero, A. P., Diaz, A., and Jimenez, S. A.
Diaz, L. A. *See* Fairley, J. A., Scott, G. A., Jensen, K. D., Goldsmith, L. A., and Diaz, L. A.
Di Bisceglie, A. M. *See* Fong, T.-L., Shindo, M., Feinstone, S. M., Hoofnagle, J. H., and Di Bisceglie, A. M.

Dickey, B. F. *See* Pothoulakis, C., LaMont, J. T., Eglow, R., Gao, N., Rubins, J. B., Theoharides, T. C., and Dickey, B. F.

Diczfalusy, U., Kase, B. F., Alexson, S. E. H., and Björkhem, I. Metabolism of prostaglandin $F_{2\alpha}$ in Zellweger syndrome. Peroxisomal β-oxidation is of major importance for in vivo degradation of prostaglandins in humans. 978.

Dinour, D. *See* Brezis, M., Heyman, S. N., Dinour, D., Epstein, F. H., and Rosen, S.

Dobrina, A., Menegazzi, R., Carlos, T. M., Nardon, E., Cramer, R., Zacchi, T., Harlen, J. M., and Patriarca, P. Mechanisms of eosinophil adherence to cultured vascular endothelial cells. Eosinophils bind to the cytokine-induced endothelial ligand vascular cell adhesion molecule-1 via the very late activation antigen-4 integrin receptor. 20.

Dodia, C. *See* Fisher, A. B., Dodia, C., Tan, Z., Ayene, I., and Eckenhoff, R. G.

Donker, A. J. M. *See* Gans, R. O. B., Bilo, H. J. G., Maarschalkerweerd, W. W. A. v., Heine, R. J., Nauta, J. J. P., and Donker, A. J. M.

Donowitz, M. *See* Cohen, M. E., Wesolek, J., McCullen, J., Rys-Sikora, K., Pandol, S., Rood, R. P., Sharp, G. W. G., and Donowitz, M.

Douglas, J. G. *See* Madhun, Z. T., Goldthwait, D. A., McKay, D., Hopfer, U., and Douglas, J. G.

Douglas, R. G., Gluckman, P. D., Ball, K., Breier, B., and Shaw, J. H. F. The effects of infusion of insulinlike growth factor (IGF) I, IGF-II, and insulin on glucose and protein metabolism in fasted lambs. 614.

Doyle, J. *See* Coetzer, T. L., Sahr, K., Prchal, J., Blacklock, H., Peterson, L., Koler, R., Doyle, J., Manaster, J., and Palek, J.

Drinkwater, D. C. *See* Navab, M., Imes, S. S., Hama, S. Y., Hough, G. P., Ross, L. A., Bork, R. W., Valente, A. J., Berliner, J. A., Drinkwater, D. C., Laks, H., and Fogelman, A. M.

Dubart, A. *See* Mitjavila, M.-T., Le Couedic, J.-P., Casadevall, N., Navarro, S., Villeval, J.-L., Dubart, A., and Vainchenker, W.

Dubertret, L. *See* Hovnanian, A., Duquesnoy, P., Amselem, S., Blanchet-Bardon, C., Lathrop, M., Dubertret, L., and Goossens, M.

Dubus, I. *See* Samuel, J. L., Barrieux, A., Dufour, S., Dubus, I., Contard, F., Koteliansky, V., Farhadian, F., Marotte, F., Thiéry, J.-P., and Rappaport, L.

Dubyak, G. R. *See* Xie, M., Jacobs, L. S., and Dubyak, G. R.

Duff, H. J. *See* Taouis, M., Sheldon, R. S., and Duff, H. J.

Dufour, S. *See* Samuel, J. L., Barrieux, A., Dufour, S., Dubus, I., Contard, F., Koteliansky, V., Farhadian, F., Marotte, F., Thiéry, J.-P., and Rappaport, L.

Dugoujon, J.-M. *See* Sié, P., Bezeaud, A., Dupouy, D., Archipoff, G., Freyssinet, J.-M., Dugoujon, J.-M., Serre, G., Guillin, M.-C., and Boneu, B.

Dunn, A. *See* Wiener, C. M., Dunn, A., and Sylvester, J. T.

Dupouy, D. *See* Sié, P., Bezeaud, A., Dupouy, D., Archipoff, G., Freyssinet, J.-M., Dugoujon, J.-M., Serre, G., Guillin, M.-C., and Boneu, B.

Duquesnoy, P. *See* Hovnanian, A., Duquesnoy, P., Amselem, S., Blanchet-Bardon, C., Lathrop, M., Dubertret, L., and Goossens, M.

Dusing, M. *See* Sprecher, D. L., Knauer, S. L., Black, D. M., Kaplan, L. A., Akeson, A. A., Dusing, M., Lattier, D., Stein, E. A., Rymaszewski, M., and Wiginton, D. A.

Duvic, M. *See* Mahoney, S. E., Duvic, M., Nickoloff, B. J., Minshall, M., Smith, L. C., Griffiths, C. E. M., Paddock, S. W., and Lewis, D. E.

Dyer, J. *See* Wright, E. M., Turk, E., Zabel, B., Mundlos, S., and Dyer, J.

Dzau, V. J. *See* Cooke, J. P., Rossitch, E., Jr., Andon, N. A., Loscalzo, J., and Dzau, V. J.

E

Eastman, E. *See* Saouaf, R., Takasaki, I., Eastman, E., Chobanian, A. V., and Brecher, P.

Eaves, C. J. *See* Otsuka, T., Thacker, J. D., Eaves, C. J., and Hogge, D. E.

Eberli, F. R. *See* Knowlton, A. A., Eberli, F. R., Brecher, P., Romo, G. M., Owen, A., and Apstein, C. S.

Eckenhoff, R. G. *See* Fisher, A. B., Dodia, C., Tan, Z., Ayene, I., and Eckenhoff, R. G.

Eckerskorn, C. *See* Hailat, N., Keim, D. R., Melhem, R. F., Zhu, X.-x., Eckerskorn, C., Brodeur, G. M., Reynolds, C. P., Seeger, R. C., Lottspeich, F., Strahler, J. R., and Hanash, S. M.

Edeker, B. L. *See* Britigan, B. E., and Edeker, B. L.

Egashira, K., Pipers, F. S., and Morgan, J. P. Effects of cocaine on epicardial coronary artery reactivity in miniature swine after endothelial injury and high cholesterol feeding. In vivo and in vitro analysis. 1307.

Eglow, R. *See* Pothoulakis, C., LaMont, J. T., Eglow, R., Gao, N., Rubins, J. B., Theoharides, T. C., and Dickey, B. F.

Eiroa, A. M. *See* Marcus, A. J., Safier, L. B., Hajjar, K. A., Ullman, H. L., Islam, N., Broekman, M. J., and Eiroa, A. M.

Eisenbarth, G. S. *See* Simon, S., Awdeh, Z., Campbell, R. D., Ronco, P., Il, Brink, S. J., Eisenbarth, G. S., Yunis, E. J., and Alper, C. A.

Eisenberg, S. *See* Sehayek, E., Lewin-Velvert, U., Chajek-Shaul, T., and Eisenberg, S.

Elias, P. M. *See* Holleran, W. M., Mao-Qiang, M., Gao, W. N., Menon, G. K., Elias, P. M., and Feingold, K. R.

Ellison, R. T., III, and Giehl, T. J. Killing of gram-negative bacteria by lactoferrin and lysozyme. 1080.

Emerson, S. G. *See* Upadhyaya, G., Guba, S. C., Sih, S. A., Feinberg, A. P., Talpaz, M., Kantarjian, H. M., Deisseroth, A. B., and Emerson, S. G.

Endo, N. *See* Sato, M., Grasser, W., Endo, N., Akins, R., Simmons, H., Thompson, D. D., Golub, E., and Rodan, G. A.

Enea, I. *See* Volpe, M., Tritto, C., de Luca, N., Mele, A. F., Lembo, G., Rubattu, S., Romano, M., de Campora, P., Enea, I., Ricciardelli, B., Trimarco, B., and Condorelli, M.

Ennis, F. A. *See* Kurane, I., Innis, B. L., Nimmannitya, S., Nisalak, A., Meager, A., Janus, J., and Ennis, F. A.

Enomoto, H. *See* Hongo, T., Kupfer, J., Enomoto, H., Sharifi, B., Giannella-Neto, D., Forrester, J. S., Singer, F. R., Goltzman, D., Hendy, G. N., Pirola, C., Fagin, J. A., and Clemens, T. L.

Entman, M. L. *See* Smith, C. W., Entman, M. L., Lane, C. L., Beaudet, A. L., Ty, T. I., Youker, K., Hawkins, H. K., and Anderson, D. C.

Epstein, F. H. *See* Brezis, M., Heyman, S. N., Dinour, D., Epstein, F. H., and Rosen, S.

Esquivel, C. *See* Linton, M. F., Gish, R., Hubl, S. T., Bütler, E., Esquivel, C., Bry, W. I., Boyles, J. K., Wardell, M. R., and Young, S. G.

Eto, T. *See* Akashi, K., Shibuya, T., Harada, M., Takamatsu, Y., Uike, N., Eto, T., and Niho, Y.

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Fagin, J. A. *See* Hongo, T., Kupfer, J., Enomoto, H., Sharifi, B., Giannella-Neto, D., Forrester, J. S., Singer, F. R., Goltzman, D., Hendy, G. N., Pirola, C., Fagin, J. A., and Clemens, T. L.

Fairley, J. A., Scott, G. A., Jensen, K. D., Goldsmith, L. A., and Diaz, L. A. Characterization of keratocalmin, a calmodulin-binding protein from human epidermis. 315.

Falagiani, P. *See* Del Prete, G. F., de Carli, M., Mastromauro, C., Biagiotti, R., Macchia, D., Falagiani, P., Ricci, M., and Romagnani, S.

Faller, D. V. *See* Kourembanas, S., Marsden, P. A., McQuillan, L. P., and Faller, D. V.

Fang, S. L. *See* Abend, S. L., Fang, S. L., Alex, S., Braverman, L. E., and Leonard, J. L.

Fant, M. E. In vitro growth rate of placental fibroblasts is developmentally regulated. 1697.

Farhadian, F. *See* Samuel, J. L., Barrieux, A., Dufour, S., Dubus, I., Contard, F., Koteliansky, V., Farhadian, F., Marotte, F., Thiéry, J.-P., and Rappaport, L.

Farrar, M. A. *See* Shaul, P. W., Kinane, B., Farrar, M. A., Buja, L. M., and Magness, R. R.

Fasano, M. B., Cousart, S., Neal, S., and McCall, C. E. Increased expression of the interleukin 1 receptor on blood neutrophils of humans with the sepsis syndrome. 1452.

Feinberg, A. P. *See* Upadhyaya, G., Guba, S. C., Sih, S. A., Feinberg, A. P., Talpaz, M., Kantarjian, H. M., Deisseroth, A. B., and Emerson, S. G.

Feingold, K. R. *See* Holleran, W. M., Mao-Qiang, M., Gao, W. N., Menon, G. K., Elias, P. M., and Feingold, K. R.
Feinstone, S. M. *See* Fong, T.-L., Shindo, M., Feinstone, S. M., Hoofnagle, J. H., and Di Bisceglie, A. M.
Fells, G. *See* Hubbard, R. C., Fells, G., Gadek, J., Pacholok, S., Humes, J., and Crystal, R. G.
Ferrari, C., Bertoletti, A., Penna, A., Cavalli, A., Valli, A., Missale, G., Pilli, M., Fowler, P., Giuberti, T., Chisari, F. V., and Fiaccadori, F. Identification of immunodominant T cell epitopes of the hepatitis B virus nucleocapsid antigen. 214.
Ferrero, A. P. *See* AyanlarBatuman, O., Ferrero, A. P., Diaz, A., and Jimenez, S. A.
Ferrone, S. *See* Maio, M., Altomonte, M., Tatake, R., Zeff, R. A., and Ferrone, S.
Fiaccadori, F. *See* Ferrari, C., Bertoletti, A., Penna, A., Cavalli, A., Valli, A., Missale, G., Pilli, M., Fowler, P., Giuberti, T., Chisari, F. V., and Fiaccadori, F.
Fiegel, V. *See* Henke, C., Fiegel, V., Peterson, M., Wick, M., Knighton, D., McCarthy, J., and Bitterman, P.
Fields, B. N. *See* Nibert, M. L., Furlong, D. B., and Fields, B. N.
Finckh, B. *See* Lehr, H. A., Hübner, C., Finckh, B., Angermüller, S., Nolte, D., Beisiegel, U., Kohlschütter, A., and Messmer, K.
Fine, K. D., Santa Ana, C. A., Porter, J. L., and Fordtran, J. S. Intestinal absorption of magnesium from food and supplements. 396.
Finkelman, F. D. *See* Takeishi, T., Martin, T. R., Katona, I. M., Finkelman, F. D., and Galli, S. J.
Firestein, G. S. *See* Broide, D. H., and Firestein, G. S.
Fisher, A. B., Dodia, C., Tan, Z., Ayene, I., and Eckenhoff, R. G. Oxygen-dependent lipid peroxidation during lung ischemia. 674.
Fisher, C. R., Chuang, J. L., Cox, R. P., Fisher, C. W., Star, R. A., and Chuang, D. T. Maple syrup urine disease in mennonites. Evidence that the Y393N mutation in E1α impedes assembly of the E1 component of branched-chain α-keto acid dehydrogenase complex. 1034.
Fisher, C. W. *See* Fisher, C. R., Chuang, J. L., Cox, R. P., Fisher, C. W., Star, R. A., and Chuang, D. T.
Fisher, L. D. *See* Schwartz, M. W., Bergman, R. N., Kahn, S. E., Taborsky, G. J., Jr., Fisher, L. D., Sipois, A. J., Woods, S. C., Steil, G. M., and Porte, D., Jr.
Fitting, C. *See* Munoz, C., Carlet, J., Fitting, C., Misset, B., Blériot, J.-P., and Cavaillon, J.-M.
Fitzgerald, D. J., Hanson, M., and FitzGerald, G. A. Systemic lysis protects against the effects of platelet activation during coronary thrombolysis. 1589.
FitzGerald, G. A. *See* Fitzgerald, D. J., Hanson, M., and FitzGerald, G. A.
Fogelman, A. M. *See* Navab, M., Imes, S. S., Hama, S. Y., Hough, G. P., Ross, L. A., Bork, R. W., Valente, A. J., Berliner, J. A., Drinkwater, D. C., Laks, H., and Fogelman, A. M.
Fong, L. G. *See* Choi, S. Y., Fong, L. G., Kirven, M. J., and Cooper, A. D.
Fong, T.-L., Shindo, M., Feinstone, S. M., Hoofnagle, J. H., and Di Bisceglie, A. M. Detection of replicative intermediates of hepatitis C viral RNA in liver and serum of patients with chronic hepatitis C. 1058.
Ford, D. A., Hazen, S. L., Saffitz, J. E., and Gross, R. W. The rapid and reversible activation of a calcium-independent plasmalogen-selective phospholipase A_2 during myocardial ischemia. 331.
Fordtran, J. S. *See* Fine, K. D., Santa Ana, C. A., Porter, J. L., and Fordtran, J. S.
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Forrest, J. N., Jr. *See* Kelley, G. G., Aassar, O. S., and Forrest, J. N., Jr.
Forrester, J. S. *See* Hongo, T., Kupfer, J., Enomoto, H., Sharifi, B., Giannella-Neto, D., Forrester, J. S., Singer, F. R., Goltzman, D., Hendy, G. N., Pirola, C., Fagin, J. A., and Clemens, T. L.
Fowler, A. A., III. *See* Gregory, T. J., Longmore, W. J., Moxley, M. A., Whitsett, J. A., Reed, C. R., Fowler, A. A., III, Hudson, L. D., Maunder, R. J., Crim, C., and Hyers, T. M.
Fowler, P. *See* Ferrari, C., Bertoletti, A., Penna, A., Cavalli, A., Valli, A., Missale, G., Pilli, M., Fowler, P., Giuberti, T., Chisari, F. V., and Fiaccadori, F.
Fraker, D. L. *See* Alexander, H. R., Sheppard, B. C., Jensen, J. C., Langstein, H. N., Buresh, C. M., Venzon, D., Walker, E. C., Fraker, D. L., Stovroff, M. C., and Norton, J. A.
Francis, H. F. *See* Limaye, A. P., Abrams, J. S., Silver, J. E., Awadzi, K., Francis, H. F., Ottesen, E. A., and Nutman, T. B.
Frangi, D., Cicardi, M., Sica, A., Colotta, F., Agostoni, A., and Davis, A. E., III. Nonsense mutations affect C1 inhibitor messenger RNA levels in patients with type I hereditary angioneurotic edema. 755.
Frants, R. R. *See* de Knijff, P., Van den Maagdenberg, A. M. J. M., Stalenhoef, A. F. H., Leuven, J. A. G., Demacker, P. N. M., Kuyt, L. P., Frants, R. R., and Havekes, L. M.
Frazer, J. *See* Her, E., Frazer, J., Austen, K. F., and Owen, W. F., Jr.
Freedman, D. O., Lujan-Trangay, A., Steel, C., Gonzalez-Peralta, C., and Nutman, T. B. Immunoregulation in onchocerciasis. Functional and phenotypic abnormalities of lymphocyte subsets and changes with therapy. 231.
Freese, J. A. *See* Berman, P. A., Human, L., and Freese, J. A.
Freyssinet, J.-M. *See* Sié, P., Bezeaud, A., Dupouy, D., Archipoff, G., Freyssinet, J.-M., Dugoujon, J.-M., Serre, G., Guillin, M.-C., and Boneu, B.
Frojmovic, M. M. *See* Gawaz, M. P., Loftus, J. C., Bajt, M. L., Frojmovic, M. M., Plow, E. F., and Ginsberg, M. H.
Fujihashi, K., McGhee, J. R., Lue, C., Beagley, K. W., Taga, T., Hirano, T., Kishimoto, T., Mestecky, J., and Kiyono, H. Human appendix B cells naturally express receptors for and respond to interleukin 6 with selective IgA1 and IgA2 synthesis. 248.
Fujii, H. *See* Shimada, T., Fujii, H., Mitsuya, H., and Nienhuis, A. W.
Furlong, D. B. *See* Nibert, M. L., Furlong, D. B., and Fields, B. N.
Furuichi, Y. *See* Gotoda, T., Yamada, N., Kawamura, M., Kozaki, K., Mori, N., Ishibashi, S., Shimano, H., Takaku, F., Yazaki, Y., Furuichi, Y., and Murase, T.

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Gaa, S. T. *See* Massey, C. V., Kohout, T. A., Gaa, S. T., Lederer, W. J., and Rogers, T. B.
Gadek, J. *See* Hubbard, R. C., Fells, G., Gadek, J., Pacholok, S., Humes, J., and Crystal, R. G.
Gaisano, M. G. *See* de Feo, P., Gaisano, M. G., and Haymond, M. W.
Galbusera, M. *See* Dent, J. A., Galbusera, M., and Ruggeri, Z. M.
Galibert, F. *See* Garbarz, M., Tse, W. T., Gallagher, P. G., Picat, C., Lecomte, M.-C., Galibert, F., Dhermy, D., and Forget, B. G.
Gall, M.-A. *See* Vaag, A., Skött, P., Damsbo, P., Gall, M.-A., Richter, E. A., and Beck-Nielsen, H.
Gallagher, P. G. *See* Garbarz, M., Tse, W. T., Gallagher, P. G., Picat, C., Lecomte, M.-C., Galibert, F., Dhermy, D., and Forget, B. G.
Galli, S. J. *See* Takeishi, T., Martin, T. R., Katona, I. M., Finkelman, F. D., and Galli, S. J.
Gans, R. O. B., Bilo, H. J. G., Maarschalkerweerd, W. W. A. v., Heine, R. J., Nauta, J. J. P., and Donker, A. J. M. Exogenous insulin augments in healthy volunteers the cardiovascular reactivity to noradrenaline but not to angiotensin II. 512.
Gao, N. *See* Pothoulakis, C., LaMont, J. T., Eglow, R., Gao, N., Rubins, J. B., Theoharides, T. C., and Dickey, B. F.
Gao, W. N. *See* Holleran, W. M., Mao-Qiang, M., Gao, W. N., Menon, G. K., Elias, P. M., and Feingold, K. R.
Garbarz, M., Tse, W. T., Gallagher, P. G., Picat, C., Lecomte, M.-C., Galibert, F., Dhermy, D., and Forget, B. G. Spectrin rouen ($\beta^{220-218}$), a novel shortened β-chain variant in a kindred with hereditary elliptocytosis. Characterization of the molecular defect as exon skipping due to a splice site mutation. 76.
Garcia-Ruiz, C. *See* Lu, S. C., Kuhlenkamp, J., Garcia-Ruiz, C., and Kaplowitz, N.
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Gawaz, M. P., Loftus, J. C., Bajt, M. L., Frojmovic, M. M., Plow, E. F., and Ginsberg, M. H. Ligand bridging mediates integrin $\alpha_{IIb}\beta_3$ (platelet GPIIB-IIIA) dependent homotypic and heterotypic cell–cell interactions. 1128.
Geerdes, A. *See* Molitoris, B. A., Geerdes, A., and McIntosh, J. R.
Geoffroy, J. S. *See* Huang, K., Geoffroy, J. S., Singer, M. S., and Rosen, S. D.
Gerdin, B. *See* Waldenström, A., Martinussen, H. J., Gerdin, B., and Hällgren, R.

Gerlach, M. *See* Benedict, C. R., Ryan, J., Wolitzky, B., Ramos, R., Gerlach, M., Tijburg, P., and Stern, D.
Getz, G. S. *See* Kundu, R. K., Tonsgard, J. H., and Getz, G. S.
Giannella-Neto, D. *See* Hongo, T., Kupfer, J., Enomoto, H., Sharifi, B., Giannella-Neto, D., Forrester, J. S., Singer, F. R., Goltzman, D., Hendy, G. N., Pirola, C., Fagin, J. A., and Clemens, T. L.
Giardina, P. *See* Watzke, H. H., Wallmark, A., Hamaguchi, N., Giardina, P., Stafford, D. W., and High, K. A.
Giebisch, G. *See* Capasso, G., Unwin, R., Agulian, S., and Giebisch, G.
Giehl, T. J. *See* Ellison, R. T., III, and Giehl, T. J.
Gilgenkrantz, H. *See* Chelly, J., Gilgenkrantz, H., Hugnot, J. P., Hamard, G., Lambert, M., Récan, D., Akli, S., Cometto, M., Kahn, A., and Kaplan, J. C.
Ginsberg, M. H. *See* Gawaz, M. P., Loftus, J. C., Bajt, M. L., Frojmovic, M. M., Plow, E. F., and Ginsberg, M. H.
Gish, R. *See* Linton, M. F., Gish, R., Hubl, S. T., Bütler, E., Esquivel, C., Bry, W. I., Boyles, J. K., Wardell, M. R., and Young, S. G.
Gitelman, S. E. *See* Lin, D., Gitelman, S. E., Saenger, P., and Miller, W. L.
Giuberti, T. *See* Ferrari, C., Bertoletti, A., Penna, A., Cavalli, A., Valli, A., Missale, G., Pilli, M., Fowler, P., Giuberti, T., Chisari, F. V., and Fiaccadori, F.
Gladson, C. L., and Cheresh, D. A. Glioblastoma expression of vitronectin and the $\alpha v\beta 3$ integrin. Adhesion mechanism for transformed glial cells. 1924.
Gleich, G. J. *See* Barker, R. L., Gundel, R. H., Gleich, G. J., Checkel, J. L., Loegering, D. A., Pease, L. R., and Hamann, K. J.
Gluck, S. *See* Bastani, B., Purcell, H., Hemken, P., Trigg, D., and Gluck, S.
Gluckman, P. D. *See* Douglas, R. G., Gluckman, P. D., Ball, K., Breier, B., and Shaw, J. H. F.
Goecke, I. A. *See* Bonilla, S., Goecke, I. A., Bozzo, S., Alvo, M., Michea, L., and Marusic, E. T.
Goldhaber, J. I. *See* Liu, E., Goldhaber, J. I., and Weiss, J. N.
Goldsmith, L. A. *See* Fairley, J. A., Scott, G. A., Jensen, K. D., Goldsmith, L. A., and Diaz, L. A.
Goldstein, I. *See* Kim, N., Azadzoi, K. M., Goldstein, I., and Saenz de Tejada, I.
Goldthwait, D. A. *See* Madhun, Z. T., Goldthwait, D. A., McKay, D., Hopfer, U., and Douglas, J. G.
Goltzman, D. *See* Hongo, T., Kupfer, J., Enomoto, H., Sharifi, B., Giannella-Neto, D., Forrester, J. S., Singer, F. R., Goltzman, D., Hendy, G. N., Pirola, C., Fagin, J. A., and Clemens, T. L.
Golub, E. *See* Sato, M., Grasser, W., Endo, N., Akins, R., Simmons, H., Thompson, D. D., Golub, E., and Rodan, G. A.
Gomez, F. *See* Ruiz, P., Gomez, F., King, M., Lopez, R., Darby, C., and Schreiber, A. D.
Gondolf, K. B. *See* Mertz, A. K. H., Batsford, S. R., Curschellas, E., Kist, M. J., and Gondolf, K. B.
Gonzalez-Peralta, C. *See* Freedman, D. O., Lujan-Trangay, A., Steel, C., Gonzalez-Peralta, C., and Nutman, T. B.
Goossens, M. *See* Hovnanian, A., Duquesnoy, P., Amselem, S., Blanchet-Bardon, C., Lathrop, M., Dubertret, L., and Goossens, M.
Gordon, D. *See* Nelken, N. A., Coughlin, S. R., Gordon, D., and Wilcox, J. N.
Gorelick, F. S. *See* Marino, C. R., Matovcik, L. M., Gorelick, F. S., and Cohn, J. A.
Gotoda, T., Yamada, N., Kawamura, M., Kozaki, K., Mori, N., Ishibashi, S., Shimano, H., Takaku, F., Yazaki, Y., Furuichi, Y., and Murase, T. Heterogeneous mutations in the human lipoprotein lipase gene in patients with familial lipoprotein lipase deficiency. 1856.
Grady, E. F., Sechi, L. A., Griffin, C. A., Schambelan, M., and Kalinyak, J. E. Expression of AT_2 receptors in the developing rat fetus. 921.
Graham, B. S., Bunton, L. A., Wright, P. F., and Karzon, D. T. Role of T lymphocyte subsets in the pathogenesis of primary infection and rechallenge with respiratory syncytial virus in mice. 1026.
Graham, I. L. *See* Gresham, H. D., Graham, I. L., Anderson, D. C., and Brown, E. J.
Granoff, D. M. *See* Lucas, A. H., Langley, R. J., Granoff, D. M., Nahm, M. H., Kitamura, M. Y., and Scott, M. G.
Grant, A. M. *See* Mann, C. J., Yen, F. T., Grant, A. M., and Bihain, B. E.
Grant, C. S. *See* Herrmann, M. A., Hay, I. D., Bartelt, D. H., Jr., Ritland, S. R., Dahl, R. J., Grant, C. S., and Jenkins, R. B.
Grasser, W. *See* Sato, M., Grasser, W., Endo, N., Akins, R., Simmons, H., Thompson, D. D., Golub, E., and Rodan, G. A.
Greenbaum, C. J., Havel, P. J., Taborsky, G. J., Jr., and Klaff, L. J. Intra-islet insulin permits glucose to directly suppress pancreatic A cell function. 767.
Greene, W. C. *See* Smith, M. R., and Greene, W. C.
Greenheck, J. R. *See* Snyder, L. S., Hertz, M. I., Peterson, M. S., Harmon, K. R., Marinelli, W. A., Henke, C. A., Greenheck, J. R., Chen, B., and Bitterman, P. B.
Gregory, R. J. *See* Berger, H. A., Anderson, M. P., Gregory, R. J., Thompson, S., Howard, P. W., Maurer, R. A., Mulligan, R., Smith, A. E., and Welsh, M. J.
Gregory, T. J., Longmore, W. J., Moxley, M. A., Whitsett, J. A., Reed, C. R., Fowler, A. A., III, Hudson, L. D., Maunder, R. J., Crim, C., and Hyers, T. M. Surfactant chemical composition and biophysical activity in acute respiratory distress syndrome. 1976.
Greiner, D. L., Shultz, L. D., Rossini, A. A., Mordes, J. P., Handler, E. S., and Rajan, T. V. Recapitulation of normal and abnormal BB rat immune system development in *scid* mouse/rat lymphohemopoietic chimeras. 717.
Gresham, H. D., Graham, I. L., Anderson, D. C., and Brown, E. J. Leukocyte adhesion–deficient neutrophils fail to amplify phagocytic function in response to stimulation. Evidence for CD11b/CD18-dependent and -independent mechanisms of phagocytosis. 588.
Griffin, C. A. *See* Grady, E. F., Sechi, L. A., Griffin, C. A., Schambelan, M., and Kalinyak, J. E.
Griffin, K. J. *See* Manns, M. P., Griffin, K. J., Sullivan, K. F., and Johnson, E. F.
Griffiths, C. E. M. *See* Mahoney, S. E., Duvic, M., Nickoloff, B. J., Minshall, M., Smith, L. C., Griffiths, C. E. M., Paddock, S. W., and Lewis, D. E.
Grimminger, F., Sibelius, U., Bhakdi, S., Suttorp, N., and Seeger, W. *Escherichia coli* hemolysin is a potent inductor of phosphoinositide hydrolysis and related metabolic responses in human neutrophils. 1531.
Groeneveld, E. *See* de Munk, G. A. W., Groeneveld, E., and Rijken, D. C.
Groop, L. C. *See* Petrides, A. S., Groop, L. C., Riely, C. A., and DeFronzo, R. A.
Gross, R. W. *See* Ford, D. A., Hazen, S. L., Saffitz, J. E., and Gross, R. W.
Grunstein, M. M. *See* Rosenberg, S. M., Berry, G. T., Yandrasitz, J. R., and Grunstein, M. M.
Guba, S. C. *See* Upadhyaya, G., Guba, S. C., Sih, S. A., Feinberg, A. P., Talpaz, M., Kantarjian, H. M., Deisseroth, A. B., and Emerson, S. G.
Guénet, J.-L. *See* Tutois, S., Montagutelli, X., Da Silva, V., Jouault, H., Rouyer-Fessard, P., Leroy-Viard, K., Guénet, J.-L., Nordmann, Y., Beuzard, Y., and Deybach, J.-C.
Guillery, E. N. *See* Smith, F. G., Smith, B. A., Guillery, E. N., and Robillard, J. E.
Guillin, M.-C. *See* Sié, P., Bezeaud, A., Dupouy, D., Archipoff, G., Freyssinet, J.-M., Dugoujon, J.-M., Serre, G., Guillin, M.-C., and Boneu, B.
Gum, J. R., Jr. *See* Toribara, N. W., Gum, J. R., Jr., Culhane, P. J., Lagace, R. E., Hicks, J. W., Petersen, G. M., and Kim, Y. S.
Gundel, R. H., Wegner, C. D., Torcellini, C. A., Clarke, C. C., Haynes, N., Rothlein, R., Smith, C. W., and Letts, L. G. Endothelial leukocyte adhesion molecule-1 mediates antigen-induced acute airway inflammation and late-phase airway obstruction in monkeys. 1407.
— *See* Barker, R. L., Gundel, R. H., Gleich, G. J., Checkel, J. L., Loegering, D. A., Pease, L. R., and Hamann, K. J.
Gunder, M. *See* Haller, R. G., Henriksson, K. G., Jorfeldt, L., Hultman, E., Wibom, R., Sahlin, K., Areskog, N.-H., Gunder, M., Ayyad, K., Blomqvist, C. G., Hall, R. E., Thuillier, P., Kennaway, N. G., and Lewis, S. F.
Gunji, H. *See* Brach, M. A., Hass, R., Sherman, M. L., Gunji, H., Weichselbaum, R., and Kufe, D.
Gupta, A. K., Kirchner, K. A., Nicholson, R., Adams, J. G., III, Schechter, A. N., Noguchi, C. T., and Steinberg, M. H. Effects of α-thalassemia and sickle polymerization tendency on the urine-concentrating defect of individuals with sickle cell trait. 1963.
Gurewich, V. *See* Liu, J.-n., and Gurewich, V.

H

Hack, C. E. *See* Levi, M., Hack, C. E., de Boer, J. P., Brandjes, D. P. M., Büller, H. R., and ten Cate, J. W.

Hagenbuch, B. *See* Jacquemin, E., Hagenbuch, B., Stieger, B., Wolkoff, A. W., and Meier, P. J.

Hailat, N., Keim, D. R., Melhem, R. F., Zhu, X.-x., Eckerskorn, C., Brodeur, G. M., Reynolds, C. P., Seeger, R. C., Lottspeich, F., Strahler, J. R., and Hanash, S. M. High levels of P19/NM23 protein in neuroblastoma are associated with advanced stage disease and with N-*myc* gene amplification. 341.

Hajjar, K. A. *See* Marcus, A. J., Safier, L. B., Hajjar, K. A., Ullman, H. L., Islam, N., Broekman, M. J., and Eiroa, A. M.

Hall, R. E. *See* Haller, R. G., Henriksson, K. G., Jorfeldt, L., Hultman, E., Wibom, R., Sahlin, K., Areskog, N.-H., Gunder, M., Ayyad, K., Blomqvist, C. G., Hall, R. E., Thuillier, P., Kennaway, N. G., and Lewis, S. F.

Haller, R. G., Henriksson, K. G., Jorfeldt, L., Hultman, E., Wibom, R., Sahlin, K., Areskog, N.-H., Gunder, M., Ayyad, K., Blomqvist, C. G., Hall, R. E., Thuillier, P., Kennaway, N. G., and Lewis, S. F. Deficiency of skeletal muscle succinate dehydrogenase and aconitase. Pathophysiology of exercise in a novel human muscle oxidative defect. 1197.

Hällgren, R. *See* Waldenström, A., Martinussen, H. J., Gerdin, B., and Hällgren, R.

Halperin, Y., Shapiro, L. E., and Surks, M. I. Correction. 2157.

—, Shapiro, L. E., and Surks, M. I. Role of L-thyroxine in nuclear thyroid hormone receptor occupancy and growth hormone production in cultured GC cells. 1291.

Halpern, R., Kaveri, S. V., and Köhler, H. Human anti-phosphorylcholine antibodies share idiotopes and are self-binding. 476.

Hama, S. Y. *See* Navab, M., Imes, S. S., Hama, S. Y., Hough, G. P., Ross, L. A., Bork, R. W., Valente, A. J., Berliner, J. A., Drinkwater, D. C., Laks, H., and Fogelman, A. M.

Hamaguchi, N. *See* Watzke, H. H., Wallmark, A., Hamaguchi, N., Giardina, P., Stafford, D. W., and High, K. A.

Hamann, K. J. *See* Barker, R. L., Gundel, R. H., Gleich, G. J., Checkel, J. L., Loegering, D. A., Pease, L. R., and Hamann, K. J.

Hamard, G. *See* Chelly, J., Gilgenkrantz, H., Hugnot, J. P., Hamard, G., Lambert, M., Récan, D., Akli, S., Cometto, M., Kahn, A., and Kaplan, J. C.

Hamilton, K. K., and Sims, P. J. The terminal complement proteins C5b-9 augment binding of high density lipoprotein and its apolipoproteins A-I and A-II to human endothelial cells. 1833.

Hamilton, R. L. *See* Hardman, D. A., Pullinger, C. R., Hamilton, R. L., Kane, J. P., and Malloy, M. J.

Hamosh, A., Trapnell, B. C., Zeitlin, P. L., Montrose-Rafizadeh, C., Rosenstein, B. J., Crystal, R. G., and Cutting, G. R. Severe deficiency of cystic fibrosis transmembrane conductance regulator messenger RNA carrying nonsense mutations R553X and W1316X in respiratory epithelial cells of patients with cystic fibrosis. 1880.

Hanaoka, K. *See* Suzuki, M., Morita, T., Hanaoka, K., Kawaguchi, Y., and Sakai, O.

Hanash, S. M. *See* Hailat, N., Keim, D. R., Melhem, R. F., Zhu, X.-x., Eckerskorn, C., Brodeur, G. M., Reynolds, C. P., Seeger, R. C., Lottspeich, F., Strahler, J. R., and Hanash, S. M.

Handin, R. I. *See* Kroll, M. H., Harris, T. S., Moake, J. L., Handin, R. I., and Schafer, A. I.

Handler, E. S. *See* Greiner, D. L., Shultz, L. D., Rossini, A. A., Mordes, J. P., Handler, E. S., and Rajan, T. V.

Handler, J. S. *See* Uchida, S., Nakanishi, T., Kwon, H. M., Preston, A. S., and Handler, J. S.

Hansen, E. J. *See* Sáez-Llorens, X., Jafari, H. S., Severien, C., Parras, F., Olsen, K. D., Hansen, E. J., Singer, I. I., and McCracken, G. H., Jr.

Hanson, L. Å. *See* Quiding, M., Nordström, I., Kilander, A., Andersson, G., Hanson, L. Å., Holmgren, J., and Czerkinsky, C.

Hanson, M. *See* Fitzgerald, D. J., Hanson, M., and FitzGerald, G. A.

Harada, M. *See* Akashi, K., Shibuya, T., Harada, M., Takamatsu, Y., Uike, N., Eto, T., and Niho, Y.

Hardman, D. A., Pullinger, C. R., Hamilton, R. L., Kane, J. P., and Malloy, M. J. Molecular and metabolic basis for the metabolic disorder normotriglyceridemic abetalipoproteinemia. 1722.

Hardy, S. A. *See* Myers, B. D., Nelson, R. G., Williams, G. W., Bennett, P. H., Hardy, S. A., Berg, R. L., Loon, N., Knowler, W. C., and Mitch, W. E.

Harlen, J. M. *See* Dobrina, A., Menegazzi, R., Carlos, T. M., Nardon, E., Cramer, R., Zacchi, T., Harlen, J. M., and Patriarca, P.

Harmon, K. R. *See* Snyder, L. S., Hertz, M. I., Peterson, M. S., Harmon, K. R., Marinelli, W. A., Henke, C. A., Greenheck, J. R., Chen, B., and Bitterman, P. B.

Harris, H. W., Jr., Strange, K., and Zeidel, M. L. Current understanding of the cellular biology and molecular structure of the antidiuretic hormone–stimulated water transport pathway. 1.

Harris, T. S. *See* Kroll, M. H., Harris, T. S., Moake, J. L., Handin, R. I., and Schafer, A. I.

Hartmann, T. *See* Ruoss, S. J., Hartmann, T., and Caughey, G. H.

Hass, R. *See* Brach, M. A., Hass, R., Sherman, M. L., Gunji, H., Weichselbaum, R., and Kufe, D.

— *See* Kharbanda, S., Nakamura, T., Stone, R., Hass, R., Bernstein, S., Datta, R., Sukhatme, V. P., and Kufe, D.

Havekes, L. M. *See* de Knijff, P., Van den Maagdenberg, A. M. J. M., Stalenhoef, A. F. H., Leuven, J. A. G., Demacker, P. N. M., Kuyt, L. P., Frants, R. R., and Havekes, L. M.

Havel, P. J. *See* Greenbaum, C. J., Havel, P. J., Taborsky, G. J., Jr., and Klaff, L. J.

Hawkins, H. K. *See* Smith, C. W., Entman, M. L., Lane, C. L., Beaudet, A. L., Ty, T. I., Youker, K., Hawkins, H. K., and Anderson, D. C.

Hay, I. D. *See* Herrmann, M. A., Hay, I. D., Bartelt, D. H., Jr., Ritland, S. R., Dahl, R. J., Grant, C. S., and Jenkins, R. B.

Haymond, M. W. *See* de Feo, P., Gaisano, M. G., and Haymond, M. W.

Haynes, N. *See* Gundel, R. H., Wegner, C. D., Torcellini, C. A., Clarke, C. C., Haynes, N., Rothlein, R., Smith, C. W., and Letts, L. G.

Hazen, S. L. *See* Ford, D. A., Hazen, S. L., Saffitz, J. E., and Gross, R. W.

Hébert, C. A. *See* Darbonne, W. C., Rice, G. C., Mohler, M. A., Apple, T., Hébert, C. A., Valente, A. J., and Baker, J. B.

Heine, R. J. *See* Gans, R. O. B., Bilo, H. J. G., Maarschalkerweerd, W. W. A. v., Heine, R. J., Nauta, J. J. P., and Donker, A. J. M.

Hemken, P. *See* Bastani, B., Purcell, H., Hemken, P., Trigg, D., and Gluck, S.

Hendy, G. N. *See* Hongo, T., Kupfer, J., Enomoto, H., Sharifi, B., Giannella-Neto, D., Forrester, J. S., Singer, F. R., Goltzman, D., Hendy, G. N., Pirola, C., Fagin, J. A., and Clemens, T. L.

Henke, C., Fiegel, V., Peterson, M., Wick, M., Knighton, D., McCarthy, J., and Bitterman, P. Identification and partial characterization of angiogenesis bioactivity in the lower respiratory tract after acute lung injury. 1386.

Henke, C. A. *See* Snyder, L. S., Hertz, M. I., Peterson, M. S., Harmon, K. R., Marinelli, W. A., Henke, C. A., Greenheck, J. R., Chen, B., and Bitterman, P. B.

Henriksson, K. G. *See* Haller, R. G., Henriksson, K. G., Jorfeldt, L., Hultman, E., Wibom, R., Sahlin, K., Areskog, N.-H., Gunder, M., Ayyad, K., Blomqvist, C. G., Hall, R. E., Thuillier, P., Kennaway, N. G., and Lewis, S. F.

Henry, R. R. *See* Kusari, J., Verma, U. S., Buse, J. B., Henry, R. R., and Olefsky, J. M.

Her, E., Frazer, J., Austen, K. F., and Owen, W. F., Jr. Eosinophil hematopoietins antagonize the programmed cell death of eosinophils. Cytokine and glucocorticoid effects on eosinophils maintained by endothelial cell–conditioned medium. 1982.

Herrmann, M. A., Hay, I. D., Bartelt, D. H., Jr., Ritland, S. R., Dahl, R. J., Grant, C. S., and Jenkins, R. B. Cytogenetic and molecular genetic studies of follicular and papillary thyroid cancers. 1596.

Hertz, M. I. *See* Snyder, L. S., Hertz, M. I., Peterson, M. S., Harmon, K. R., Marinelli, W. A., Henke, C. A., Greenheck, J. R., Chen, B., and Bitterman, P. B.

Heyman, S. N. *See* Brezis, M., Heyman, S. N., Dinour, D., Epstein, F. H., and Rosen, S.

Hibbs, M. S. *See* Unemori, E. N., Hibbs, M. S., and Amento, E. P.

Hicks, J. W. *See* Toribara, N. W., Gum, J. R., Jr., Culhane, P. J., Lagace, R. E., Hicks, J. W., Petersen, G. M., and Kim, Y. S.

High, K. A. *See* Watzke, H. H., Wallmark, A., Hamaguchi, N., Giardina, P., Stafford, D. W., and High, K. A.

Hill, M., and McCallum, R. Altered transcriptional regulation of phos-

phoenolpyruvate carboxykinase in rats following endotoxin treatment. 811.
Hillson, J. *See* Olee, T., Yang, P.-M., Siminovitch, K. A., Olsen, N. J., Hillson, J., Wu, J., Kozin, F., Carson, D. A., and Chen, P. P.
Hinek, A., Mecham, R. P., Keeley, F., and Rabinovitch, M. Impaired elastin fiber assembly related to reduced 67-kD elastin–binding protein in fetal lamb ductus arteriosus and in cultured aortic smooth muscle cells treated with chondroitin sulfate. 2083.
Hines, D. K. *See* Rocha-Singh, K. J., Hines, D. K., Honbo, N. Y., and Karliner, J. S.
Hirakawa, N. *See* Qiu, S.-M., Wen, G., Hirakawa, N., Soloway, R. D., Hong, N.-K., and Crowther, R. S.
Hirano, T. *See* Fujihashi, K., McGhee, J. R., Lue, C., Beagley, K. W., Taga, T., Hirano, T., Kishimoto, T., Mestecky, J., and Kiyono, H.
Hirschel-Scholz, S. *See* Sappino, A.-P., Belin, D., Huarte, J., Hirschel-Scholz, S., Saurat, J.-H., and Vassalli, J.-D.
Hockertz, S. *See* Roesler, J., Hockertz, S., Vogt, B., and Lohmann-Matthes, M.-L.
Hoefler, G., Paschke, E., Hoefler, S., Moser, A. B., and Moser, H. W. Photosensitized killing of cultured fibroblasts from patients with peroxisomal disorders due to pyrene fatty acid–mediated ultraviolet damage. 1873.
Hoefler, S. *See* Hoefler, G., Paschke, E., Hoefler, S., Moser, A. B., and Moser, H. W.
Hoermann, R., Schumm-Draeger, P.-M., Rehbach, K., and Mann, K. Asialoagalacto–human chorionic gonadotropin, a carbohydrate-modified variant of human chorionic gonadotropin, antagonizes the stimulatory actions of bovine thyroid-stimulating hormone on thyroid function and HLA-DR expression in human thyroid in vitro and in vivo. 1947.
Hoffman, B. B. *See* Sakaue, M., and Hoffman, B. B.
Hogge, D. E. *See* Otsuka, T., Thacker, J. D., Eaves, C. J., and Hogge, D. E.
Holleran, W. M., Mao-Qiang, M., Gao, W. N., Menon, G. K., Elias, P. M., and Feingold, K. R. Sphingolipids are required for mammalian epidermal barrier function. Inhibition of sphingolipid synthesis delays barrier recovery after acute perturbation. 1338.
Holman, R. *See* Myers, B. M., Prendergast, F. G., Holman, R., Kuntz, S. M., and LaRusso, N. F.
Holmgren, J. *See* Quiding, M., Nordström, I., Kilander, A., Andersson, G., Hanson, L. Å., Holmgren, J., and Czerkinsky, C.
Holodniy, M., Katzenstein, D. A., Israelski, D. M., and Merigan, T. C. Reduction in plasma human immunodeficiency virus ribonucleic acid after dideoxynucleoside therapy as determined by the polymerase chain reaction. 1755.
Holroyd, K. J. *See* Jaffe, H. A., Buhl, R., Mastrangeli, A., Holroyd, K. J., Saltini, C., Czerski, D., Jaffe, H. S., Kramer, S., Sherwin, S., and Crystal, R. G.
Holt, S. C. *See* Šadžienė, A., Thomas, D. D., Bundoc, V. G., Holt, S. C., and Barbour, A. G.
Honbo, N. Y. *See* Rocha-Singh, K. J., Hines, D. K., Honbo, N. Y., and Karliner, J. S.
— *See* Rocha-Singh, K. J., Honbo, N. Y., and Karliner, J. S.
Hong, N.-K. *See* Qiu, S.-M., Wen, G., Hirakawa, N., Soloway, R. D., Hong, N.-K., and Crowther, R. S.
Hongo, T., Kupfer, J., Enomoto, H., Sharifi, B., Giannella-Neto, D., Forrester, J. S., Singer, F. R., Goltzman, D., Hendy, G. N., Pirola, C., Fagin, J. A., and Clemens, T. L. Abundant expression of parathyroid hormone–related protein in primary rat aortic smooth muscle cells accompanies serum-induced proliferation. 1841.
Hoofnagle, J. H. *See* Fong, T.-L., Shindo, M., Feinstone, S. M., Hoofnagle, J. H., and Di Bisceglie, A. M.
Hopfer, U. *See* Madhun, Z. T., Goldthwait, D. A., McKay, D., Hopfer, U., and Douglas, J. G.
Horie, S. *See* Moe, O. W., Miller, R. T., Horie, S., Cano, A., Preisig, P. A., and Alpern, R. J.
Horikoshi, S., McCune, B. K., Ray, P. E., Kopp, J. B., Sporn, M. B., and Klotman, P. E. Water deprivation stimulates transforming growth factor-β2 accumulation in the juxtaglomerular apparatus of mouse kidney. 2117.
Horwitz, M. A. *See* Byrd, T. F., and Horwitz, M. A.
— *See* Byrd, T. F., and Horwitz, M. A.
Hott, M. *See* Marie, P. J., de Vernejoul, M. C., Connes, D., and Hott, M.
Hough, G. P. *See* Navab, M., Imes, S. S., Hama, S. Y., Hough, G. P., Ross, L. A., Bork, R. W., Valente, A. J., Berliner, J. A., Drinkwater, D. C., Laks, H., and Fogelman, A. M.
Houghton, A. N. *See* Chapman, P. B., and Houghton, A. N.
Hovnanian, A., Duquesnoy, P., Amselem, S., Blanchet-Bardon, C., Lathrop, M., Dubertret, L., and Goossens, M. Exclusion of linkage between the collagenase gene and generalized recessive dystrophic epidermolysis bullosa phenotype. 1716.
Howard, P. W. *See* Berger, H. A., Anderson, M. P., Gregory, R. J., Thompson, S., Howard, P. W., Maurer, R. A., Mulligan, R., Smith, A. E., and Welsh, M. J.
Huang, H. *See* Meggs, L. G., Huang, H., Li, P., Capasso, J. M., and Anversa, P.
Huang, K., Geoffroy, J. S., Singer, M. S., and Rosen, S. D. A lymphocyte homing receptor (L-Selectin) mediates the in vitro attachment of lymphocytes to myelinated tracts of the central nervous system. 1778.
Huarte, J. *See* Sappino, A.-P., Belin, D., Huarte, J., Hirschel-Scholz, S., Saurat, J.-H., and Vassalli, J.-D.
Hubbard, R. C., Fells, G., Gadek, J., Pacholok, S., Humes, J., and Crystal, R. G. Neutrophil accumulation in the lung in α1-antitrypsin deficiency. Spontaneous release of leukotriene B_4 by alveolar macrophages. 891.
Hubl, S. T. *See* Linton, M. F., Gish, R., Hubl, S. T., Bütler, E., Esquivel, C., Bry, W. I., Boyles, J. K., Wardell, M. R., and Young, S. G.
Hübner, C. *See* Lehr, H. A., Hübner, C., Finckh, B., Angermüller, S., Nolte, D., Beisiegel, U., Kohlschütter, A., and Messmer, K.
Hudson, L. D. *See* Gregory, T. J., Longmore, W. J., Moxley, M. A., Whitsett, J. A., Reed, C. R., Fowler, A. A., III, Hudson, L. D., Maunder, R. J., Crim, C., and Hyers, T. M.
Hugnot, J. P. *See* Chelly, J., Gilgenkrantz, H., Hugnot, J. P., Hamard, G., Lambert, M., Récan, D., Akli, S., Cometto, M., Kahn, A., and Kaplan, J. C.
Hultman, E. *See* Haller, R. G., Henriksson, K. G., Jorfeldt, L., Hultman, E., Wibom, R., Sahlin, K., Areskog, N.-H., Gunder, M., Ayyad, K., Blomqvist, C. G., Hall, R. E., Thuillier, P., Kennaway, N. G., and Lewis, S. F.
Human, L. *See* Berman, P. A., Human, L., and Freese, J. A.
Humbría, A. *See* Laffón, A., García-Vicuña, R., Humbría, A., Postigo, A. A., Corbí, A. L., de Landázuri, M. O., and Sánchez-Madrid, F.
Humes, J. *See* Hubbard, R. C., Fells, G., Gadek, J., Pacholok, S., Humes, J., and Crystal, R. G.
Hyers, T. M. *See* Gregory, T. J., Longmore, W. J., Moxley, M. A., Whitsett, J. A., Reed, C. R., Fowler, A. A., III, Hudson, L. D., Maunder, R. J., Crim, C., and Hyers, T. M.

I

Ieiri, T., Cochaux, P., Targovnik, H. M., Suzuki, M., Shimoda, S.-I., Perret, J., and Vassart, G. A 3′ splice site mutation in the thyroglobulin gene responsible for congenital goiter with hypothyroidism. 1901.
Ikenouchi, H., Kohmoto, O., McMillan, M., and Barry, W. H. Contributions of $[Ca^{2+}]_i$, $[P_i]_i$, and pH_i to altered diastolic myocyte tone during partial metabolic inhibition. 55.
Imes, S. S. *See* Navab, M., Imes, S. S., Hama, S. Y., Hough, G. P., Ross, L. A., Bork, R. W., Valente, A. J., Berliner, J. A., Drinkwater, D. C., Laks, H., and Fogelman, A. M.
Inchiostro, S. *See* Tessari, P., Inchiostro, S., Biolo, G., Vincenti, E., and Sabadin, L.
Indik, Z., Kelly, C., Chien, P., Levinson, A. I., and Schreiber, A. D. Human $Fc_\gamma RII$, in the absence of other Fc_γ receptors, mediates a phagocytic signal. 1766.
Innis, B. L. *See* Kurane, I., Innis, B. L., Nimmannitya, S., Nisalak, A., Meager, A., Janus, J., and Ennis, F. A.
Ishibashi, S. *See* Gotoda, T., Yamada, N., Kawamura, M., Kozaki, K., Mori, N., Ishibashi, S., Shimano, H., Takaku, F., Yazaki, Y., Furuichi, Y., and Murase, T.
Ishikawa, T. *See* Wakita, T., Kakumu, S., Shibata, M., Yoshioka, K., Ito, Y., Shinagawa, T., Ishikawa, T., Takayanagi, M., and Morishima, T.
Islam, N. *See* Marcus, A. J., Safier, L. B., Hajjar, K. A., Ullman, H. L., Islam, N., Broekman, M. J., and Eiroa, A. M.
Israelski, D. M. *See* Holodniy, M., Katzenstein, D. A., Israelski, D. M., and Merigan, T. C.

Ito, Y. *See* Wakita, T., Kakumu, S., Shibata, M., Yoshioka, K., Ito, Y., Shinagawa, T., Ishikawa, T., Takayanagi, M., and Morishima, T.

J

Jacobs, L. S. *See* Xie, M., Jacobs, L. S., and Dubyak, G. R.

Jacquemin, E., Hagenbuch, B., Stieger, B., Wolkoff, A. W., and Meier, P. J. Expression of the hepatocellular chloride-dependent sulfobromophthalein uptake system in *Xenopus laevis* oocytes. 2146.

Jadali, F. *See* Boden, G., Jadali, F., White, J., Liang, Y., Mozzoli, M., Chen, X., Coleman, E., and Smith, C.

Jafari, H. S. *See* Sáez-Llorens, X., Jafari, H. S., Severien, C., Parras, F., Olsen, K. D., Hansen, E. J., Singer, I. I., and McCracken, G. H., Jr.

Jaffe, H. A., Buhl, R., Mastrangeli, A., Holroyd, K. J., Saltini, C., Czerski, D., Jaffe, H. S., Kramer, S., Sherwin, S., and Crystal, R. G. Organ specific cytokine therapy. Local activation of mononuclear phagocytes by delivery of an aerosol of recombinant interferon-γ to the human lung. 297.

Jaffe, H. S. *See* Jaffe, H. A., Buhl, R., Mastrangeli, A., Holroyd, K. J., Saltini, C., Czerski, D., Jaffe, H. S., Kramer, S., Sherwin, S., and Crystal, R. G.

Jakschik, B. A. *See* Zhang, Y., Ramos, B. F., and Jakschik, B. A.

Janus, J. *See* Kurane, I., Innis, B. L., Nimmannitya, S., Nisalak, A., Meager, A., Janus, J., and Ennis, F. A.

Jenkins, R. B. *See* Herrmann, M. A., Hay, I. D., Bartelt, D. H., Jr., Ritland, S. R., Dahl, R. J., Grant, C. S., and Jenkins, R. B.

Jensen, J. C. *See* Alexander, H. R., Sheppard, B. C., Jensen, J. C., Langstein, H. N., Buresh, C. M., Venzon, D., Walker, E. C., Fraker, D. L., Stovroff, M. C., and Norton, J. A.

Jensen, K. D. *See* Fairley, J. A., Scott, G. A., Jensen, K. D., Goldsmith, L. A., and Diaz, L. A.

Jensen, M. D. *See* Martin, M. L., and Jensen, M. D.

Jimenez, S. A. *See* AyanlarBatuman, O., Ferrero, A. P., Diaz, A., and Jimenez, S. A.

Johnson, E. F. *See* Manns, M. P., Griffin, K. J., Sullivan, K. F., and Johnson, E. F.

Jones, E. M. *See* Moore, M. C., Cherrington, A. D., Cilne, G., Pagliassotti, M. J., Jones, E. M., Neal, D. W., Badet, C., and Shulman, G. I.

Jorfeldt, L. *See* Haller, R. G., Henriksson, K. G., Jorfeldt, L., Hultman, E., Wibom, R., Sahlin, K., Areskog, N.-H., Gunder, M., Ayyad, K., Blomqvist, C. G., Hall, R. E., Thuillier, P., Kennaway, N. G., and Lewis, S. F.

Jouault, H. *See* Tutois, S., Montagutelli, X., Da Silva, V., Jouault, H., Rouyer-Fessard, P., Leroy-Viard, K., Guénet, J.-L., Nordmann, Y., Beuzard, Y., and Deybach, J.-C.

K

Kahn, A. *See* Chelly, J., Gilgenkrantz, H., Hugnot, J. P., Hamard, G., Lambert, M., Récan, D., Akli, S., Cometto, M., Kahn, A., and Kaplan, J. C.

Kahn, S. E. *See* Schwartz, M. W., Bergman, R. N., Kahn, S. E., Taborsky, G. J., Jr., Fisher, L. D., Sipois, A. J., Woods, S. C., Steil, G. M., and Porte, D., Jr.

Kaissling, B. *See* Kurtz, A., Kaissling, B., Busse, R., and Baier, W.

Kakumu, S. *See* Wakita, T., Kakumu, S., Shibata, M., Yoshioka, K., Ito, Y., Shinagawa, T., Ishikawa, T., Takayanagi, M., and Morishima, T.

Kalinyak, J. E. *See* Grady, E. F., Sechi, L. A., Griffin, C. A., Schambelan, M., and Kalinyak, J. E.

Kaltreider, H. B. *See* Curtis, J. L., Byrd, P. K., Warnock, M. L., and Kaltreider, H. B.

Kane, J. P. *See* Hardman, D. A., Pullinger, C. R., Hamilton, R. L., Kane, J. P., and Malloy, M. J.

Kantarjian, H. M. *See* Upadhyaya, G., Guba, S. C., Sih, S. A., Feinberg, A. P., Talpaz, M., Kantarjian, H. M., Deisseroth, A. B., and Emerson, S. G.

Kanzaki, T., Wang, A. M., and Desnick, R. J. Lysosomal α-*N*-acetylgalactosaminidase deficiency, the enzymatic defect in angiokeratoma corporis diffusum with glycopeptiduria. 707.

Kaplan, J. C. *See* Chelly, J., Gilgenkrantz, H., Hugnot, J. P., Hamard, G., Lambert, M., Récan, D., Akli, S., Cometto, M., Kahn, A., and Kaplan, J. C.

Kaplan, L. A. *See* Sprecher, D. L., Knauer, S. L., Black, D. M., Kaplan, L. A., Akeson, A. A., Dusing, M., Lattier, D., Stein, E. A., Rymaszewski, M., and Wiginton, D. A.

Kaplowitz, N. *See* Lu, S. C., Kuhlenkamp, J., Garcia-Ruiz, C., and Kaplowitz, N.

Karliner, J. S. *See* Rocha-Singh, K. J., Hines, D. K., Honbo, N. Y., and Karliner, J. S.

— *See* Rocha-Singh, K. J., Honbo, N. Y., and Karliner, J. S.

Karzon, D. T. *See* Graham, B. S., Bunton, L. A., Wright, P. F., and Karzon, D. T.

Kase, B. F. *See* Diczfalusy, U., Kase, B. F., Alexson, S. E. H., and Björkhem, I.

Katona, I. M. *See* Takeishi, T., Martin, T. R., Katona, I. M., Finkelman, F. D., and Galli, S. J.

Katzenstein, D. A. *See* Holodniy, M., Katzenstein, D. A., Israelski, D. M., and Merigan, T. C.

Kaveri, S. V. *See* Halpern, R., Kaveri, S. V., and Köhler, H.

Kawaguchi, Y. *See* Suzuki, M., Morita, T., Hanaoka, K., Kawaguchi, Y., and Sakai, O.

Kawamura, M. *See* Gotoda, T., Yamada, N., Kawamura, M., Kozaki, K., Mori, N., Ishibashi, S., Shimano, H., Takaku, F., Yazaki, Y., Furuichi, Y., and Murase, T.

Keeley, F. *See* Hinek, A., Mecham, R. P., Keeley, F., and Rabinovitch, M.

Keim, D. R. *See* Hailat, N., Keim, D. R., Melhem, R. F., Zhu, X.-x., Eckerskorn, C., Brodeur, G. M., Reynolds, C. P., Seeger, R. C., Lottspeich, F., Strahler, J. R., and Hanash, S. M.

Kekomaki, R., Dawson, B., McFarland, J., and Kunicki, T. J. Localization of human platelet autoantigens to the cysteine-rich region of glycoprotein IIIa. 847.

Kelley, G. G., Aassar, O. S., and Forrest, J. N., Jr. Endogenous adenosine is an autacoid feedback inhibitor of chloride transport in the shark rectal gland. 1933.

Kelly, C. *See* Indik, Z., Kelly, C., Chien, P., Levinson, A. I., and Schreiber, A. D.

Kelly, C. J. *See* Meyers, C. M., and Kelly, C. J.

Kelly, N. M. *See* Opal, S. M., Cross, A. S., Sadoff, J. C., Collins, H. H., Kelly, N. M., Victor, G. H., Palardy, J. E., and Bodmer, M. W.

Kennaway, N. G. *See* Haller, R. G., Henriksson, K. G., Jorfeldt, L., Hultman, E., Wibom, R., Sahlin, K., Areskog, N.-H., Gunder, M., Ayyad, K., Blomqvist, C. G., Hall, R. E., Thuillier, P., Kennaway, N. G., and Lewis, S. F.

Keung, E. C., and Li, Q. Lactate activates ATP-sensitive potassium channels in guinea pig ventricular myocytes. 1772.

Kharbanda, S., Nakamura, T., Stone, R., Hass, R., Bernstein, S., Datta, R., Sukhatme, V. P., and Kufe, D. Expression of the early growth response 1 and 2 zinc finger genes during induction of monocytic differentiation. 571.

Kilander, A. *See* Quiding, M., Nordström, I., Kilander, A., Andersson, G., Hanson, L. Å., Holmgren, J., and Czerkinsky, C.

Kim, N., Azadzoi, K. M., Goldstein, I., and Saenz de Tejada, I. A nitric oxide–like factor mediates nonadrenergic-noncholinergic neurogenic relaxation of penile corpus cavernosum smooth muscle. 112.

Kim, Y. S. *See* Toribara, N. W., Gum, J. R., Jr., Culhane, P. J., Lagace, R. E., Hicks, J. W., Petersen, G. M., and Kim, Y. S.

Kinane, B. *See* Shaul, P. W., Kinane, B., Farrar, M. A., Buja, L. M., and Magness, R. R.

King, M. *See* Ruiz, P., Gomez, F., King, M., Lopez, R., Darby, C., and Schreiber, A. D.

King, T. E., Jr. *See* Carré, P. C., Mortenson, R. L., King, T. E., Jr., Noble, P. W., Sable, C. L., and Riches, D. W. H.

Kirchner, K. A. *See* Gupta, A. K., Kirchner, K. A., Nicholson, R., Adams, J. G., III, Schechter, A. N., Noguchi, C. T., and Steinberg, M. H.

Kirven, M. J. *See* Choi, S. Y., Fong, L. G., Kirven, M. J., and Cooper, A. D.

Kishimoto, T. *See* Fujihashi, K., McGhee, J. R., Lue, C., Beagley, K. W., Taga, T., Hirano, T., Kishimoto, T., Mestecky, J., and Kiyono, H.

Kist, M. J. *See* Mertz, A. K. H., Batsford, S. R., Curschellas, E., Kist, M. J., and Gondolf, K. B.

Kitajima, I., Yamamoto, K., Sato, K., Nakajima, Y., Nakajima, T., Maruyama, I., Osame, M., and Nishioka, K. Detection of human T cell lymphotropic virus type I proviral DNA and its gene expression in synovial cells in chronic inflammatory arthropathy. 1315.
Kitamura, M. Y. *See* Lucas, A. H., Langley, R. J., Granoff, D. M., Nahm, M. H., Kitamura, M. Y., and Scott, M. G.
Kiyono, H. *See* Fujihashi, K., McGhee, J. R., Lue, C., Beagley, K. W., Taga, T., Hirano, T., Kishimoto, T., Mestecky, J., and Kiyono, H.
Klaff, L. J. *See* Greenbaum, C. J., Havel, P. J., Taborsky, G. J., Jr., and Klaff, L. J.
Klotman, P. E. *See* Horikoshi, S., McCune, B. K., Ray, P. E., Kopp, J. B., Sporn, M. B., and Klotman, P. E.
Knauer, S. L. *See* Sprecher, D. L., Knauer, S. L., Black, D. M., Kaplan, L. A., Akeson, A. A., Dusing, M., Lattier, D., Stein, E. A., Rymaszewski, M., and Wiginton, D. A.
Knight, B. L. *See* Soutar, A. K., McCarthy, S. N., Seed, M., and Knight, B. L.
Knighton, D. *See* Henke, C., Fiegel, V., Peterson, M., Wick, M., Knighton, D., McCarthy, J., and Bitterman, P.
Knowler, W. C. *See* Myers, B. D., Nelson, R. G., Williams, G. W., Bennett, P. H., Hardy, S. A., Berg, R. L., Loon, N., Knowler, W. C., and Mitch, W. E.
— *See* Swinburn, B. A., Nyomba, B. L., Saad, M. F., Zurlo, F., Raz, I., Knowler, W. C., Lillioja, S., Bogardus, C., and Ravussin, E.
Knowlton, A. A., Eberli, F. R., Brecher, P., Romo, G. M., Owen, A., and Apstein, C. S. A single myocardial stretch or decreased systolic fiber shortening stimulates the expression of heat shock protein 70 in the isolated, erythrocyte-perfused rabbit heart. 2018.
Köhler, H. *See* Halpern, R., Kaveri, S. V., and Köhler, H.
Kohlschütter, A. *See* Lehr, H. A., Hübner, C., Finckh, B., Angermüller, S., Nolte, D., Beisiegel, U., Kohlschütter, A., and Messmer, K.
Kohmoto, O. *See* Ikenouchi, H., Kohmoto, O., McMillan, M., and Barry, W. H.
Kohout, T. A. *See* Massey, C. V., Kohout, T. A., Gaa, S. T., Lederer, W. J., and Rogers, T. B.
Kolbeck, S. *See* Steers, W. D., Kolbeck, S., Creedon, D., and Tuttle, J. B.
Koler, R. *See* Coetzer, T. L., Sahr, K., Prchal, J., Blacklock, H., Peterson, L., Koler, R., Doyle, J., Manaster, J., and Palek, J.
Koller, C. A. *See* Blume, S. W., Snyder, R. C., Ray, R., Thomas, S., Koller, C. A., and Miller, D. M.
Komajda, M. *See* Boheler, K. R., Carrier, L., de la Bastie, D., Allen, P. D., Komajda, M., Mercadier, J.-J., and Schwartz, K.
Koopman, W. J. In search of Mr. Wizard. Presidential address to the American Society for Clinical Investigation, Seattle, WA, 4 May 1991. 1063.
Kopp, J. B. *See* Horikoshi, S., McCune, B. K., Ray, P. E., Kopp, J. B., Sporn, M. B., and Klotman, P. E.
Koretsune, Y. *See* Corretti, M. C., Koretsune, Y., Kusuoka, H., Chacko, V. P., Zweier, J. L., and Marban, E.
Kornfeld, H. *See* Rand, T. H., Silberstein, D. S., Kornfeld, H., and Weller, P. F.
Korte, E. *See* Martin, W. H., III, Spina, R. J., Korte, E., Yarasheski, K. E., Angelopoulos, T. J., Nemeth, P. M., and Saffitz, J. E.
Koteliansky, V. *See* Samuel, J. L., Barrieux, A., Dufour, S., Dubus, I., Contard, F., Koteliansky, V., Farhadian, F., Marotte, F., Thiéry, J.-P., and Rappaport, L.
Kourembanas, S., Marsden, P. A., McQuillan, L. P., and Faller, D. V. Hypoxia induces endothelin gene expression and secretion in cultured human endothelium. 1054.
Kozaki, K. *See* Gotoda, T., Yamada, N., Kawamura. M., Kozaki, K., Mori, N., Ishibashi, S., Shimano, H., Takaku, F., Yazaki, Y., Furuichi, Y., and Murase, T.
Kozin, F. *See* Olee, T., Yang, P.-M., Siminovitch, K. A., Olsen, N. J., Hillson, J., Wu, J., Kozin, F., Carson, D. A., and Chen, P. P.
Krall, J. *See* Movsesian, M. A., Smith, C. J., Krall, J., Bristow, M. R., and Manganiello, V. C.
Kramer, S. *See* Jaffe, H. A., Buhl, R., Mastrangeli, A., Holroyd, K. J., Saltini, C., Czerski, D., Jaffe, H. S., Kramer, S., Sherwin, S., and Crystal, R. G.
Krapf, R., and Solioz, M. Correction. 2159.
—, and Solioz, M. Na/H antiporter mRNA expression in single nephron segments of rat kidney cortex. 783.
Krauss, J. C., Mayo-Bond, L. A., Rogers, C. E., Weber, K. L., Todd, R. F., III, and Wilson, J. M. An in vivo animal model of gene therapy for leukocyte adhesion deficiency. 1412.
Kroll, M. H., Harris, T. S., Moake, J. L., Handin, R. I., and Schafer, A. I. von Willebrand factor binding to platelet Gplb initiates signals for platelet activation. 1568.
Kufe, D. *See* Brach, M. A., Hass, R., Sherman, M. L., Gunji, H., Weichselbaum, R., and Kufe, D.
— *See* Kharbanda, S., Nakamura, T., Stone, R., Hass, R., Bernstein, S., Datta, R., Sukhatme, V. P., and Kufe, D.
Kuhlenkamp, J. *See* Lu, S. C., Kuhlenkamp, J., Garcia-Ruiz, C., and Kaplowitz, N.
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Kuis, W., Villiger, P. M., Leser, H.-G., and Lotz, M. Differential processing of proenkephalin-A by human peripheral blood monocytes and T lymphocytes. 817.
Kuivaniemi, H., Tromp, G., and Prockop, D. J. Genetic causes of aortic aneurysms. Unlearning at least part of what the textbooks say. 1441.
Kundu, R. K., Tonsgard, J. H., and Getz, G. S. Induction of omega-oxidation of monocarboxylic acids in rats by acetylsalicylic acid. 1865.
Kunicki, T. J. *See* Kekomaki, R., Dawson, B., McFarland, J., and Kunicki, T. J.
Kuntz, S. M. *See* Myers, B. M., Prendergast, F. G., Holman, R., Kuntz, S. M., and LaRusso, N. F.
Kupfer, J. *See* Hongo, T., Kupfer, J., Enomoto, H., Sharifi, B., Giannella-Neto, D., Forrester, J. S., Singer, F. R., Goltzman, D., Hendy, G. N., Pirola, C., Fagin, J. A., and Clemens, T. L.
Kurane, I., Innis, B. L., Nimmannitya, S., Nisalak, A., Meager, A., Janus, J., and Ennis, F. A. Activation of T lymphocytes in dengue virus infections. High levels of soluble interleukin 2 receptor, soluble CD4, soluble CD8, interleukin 2, and interferon-γ in sera of children with dengue. 1473.
Kurtz, A., Kaissling, B., Busse, R., and Baier, W. Endothelial cells modulate renin secretion from isolated mouse juxtaglomerular cells. 1147.
Kusari, J., Verma, U. S., Buse, J. B., Henry, R. R., and Olefsky, J. M. Analysis of the gene sequences of the insulin receptor and the insulin-sensitive glucose transporter (GLUT-4) in patients with common-type non–insulin-dependent diabetes mellitus. 1323.
Kushner, P. *See* Scott, G. K., Kushner, P., Vigne, J.-L., and Benz, C. C.
Kusuoka, H. *See* Corretti, M. C., Koretsune, Y., Kusuoka, H., Chacko, V. P., Zweier, J. L., and Marban, E.
Kuwahara, M., Shi, L.-B., Marumo, F., and Verkman, A. S. Transcellular water flow modulates water channel exocytosis and endocytosis in kidney collecting tubule. 423.
Kuyt, L. P. *See* de Knijff, P., Van den Maagdenberg, A. M. J. M., Stalenhoef, A. F. H., Leuven, J. A. G., Demacker, P. N. M., Kuyt, L. P., Frants, R. R., and Havekes, L. M.
Kwon, H. M. *See* Uchida, S., Nakanishi, T., Kwon, H. M., Preston, A. S., and Handler, J. S.

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Lackner, C., Boerwinkle, E., Leffert, C. C., Rahmig, T., and Hobbs, H. H. Correction. 723.
Laffón, A., García-Vicuña, R., Humbría, A., Postigo, A. A., Corbí, A. L., de Landázuri, M. O., and Sánchez-Madrid, F. Upregulated expression and function of VLA-4 fibronectin receptors on human activated T cells in rheumatoid arthritis. 546.
Lagace, R. E. *See* Toribara, N. W., Gum, J. R., Jr., Culhane, P. J., Lagace, R. E., Hicks, J. W., Petersen, G. M., and Kim, Y. S.
Laks, H. *See* Navab, M., Imes, S. S., Hama, S. Y., Hough, G. P., Ross, L. A., Bork, R. W., Valente, A. J., Berliner, J. A., Drinkwater, D. C., Laks, H., and Fogelman, A. M.
Lambert, M. *See* Chelly, J., Gilgenkrantz, H., Hugnot, J. P., Hamard, G., Lambert, M., Récan, D., Akli, S., Cometto, M., Kahn, A., and Kaplan, J. C.
LaMont, J. T. *See* Pothoulakis, C., LaMont, J. T., Eglow, R., Gao, N., Rubins, J. B., Theoharides, T. C., and Dickey, B. F.
Lane, C. L. *See* Mulligan, M. S., Varani, J., Dame, M. K., Lane, C. L., Smith, C. W., Anderson, D. C., and Ward, P. A.

— *See* Smith, C. W., Entman, M. L., Lane, C. L., Beaudet, A. L., Ty, T. I., Youker, K., Hawkins, H. K., and Anderson, D. C.
Langley, R. J. *See* Lucas, A. H., Langley, R. J., Granoff, D. M., Nahm, M. H., Kitamura, M. Y., and Scott, M. G.
Langstein, H. N. *See* Alexander, H. R., Sheppard, B. C., Jensen, J. C., Langstein, H. N., Buresh, C. M., Venzon, D., Walker, E. C., Fraker, D. L., Stovroff, M. C., and Norton, J. A.
Lantz, M., Thysell, H., Nilsson, E., and Olsson, I. On the binding of tumor necrosis factor (TNF) to heparin and the release in vivo of the TNF-binding protein I by heparin. 2026.
LaRusso, N. F. *See* Myers, B. M., Prendergast, F. G., Holman, R., Kuntz, S. M., and LaRusso, N. F.
Lathrop, M. *See* Hovnanian, A., Duquesnoy, P., Amselem, S., Blanchet-Bardon, C., Lathrop, M., Dubertret, L., and Goossens, M.
Lattier, D. *See* Sprecher, D. L., Knauer, S. L., Black, D. M., Kaplan, L. A., Akeson, A. A., Dusing, M., Lattier, D., Stein, E. A., Rymaszewski, M., and Wiginton, D. A.
Laurian, Y. *See* Allain, J.-P., Dailey, S. H., Laurian, Y., Vallari, D. S., Rafowicz, A., Desai, S. M., and Devare, S. G.
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Le Couedic, J.-P. *See* Mitjavila, M.-T., Le Couedic, J.-P., Casadevall, N., Navarro, S., Villeval, J.-L., Dubart, A., and Vainchenker, W.
Lederer, W. J. *See* Massey, C. V., Kohout, T. A., Gaa, S. T., Lederer, W. J., and Rogers, T. B.
Lee, F. *See* Levitt, L. J., Nagler, A., Lee, F., Abrams, J., Shatsky, M., and Thompson, D.
Lee, J. A., and Allen, D. G. Mechanisms of acute ischemic contractile failure of the heart. Role of intracellular calcium. 361.
Lefer, A. M. *See* Ma, X.-L., Tsao, P. S., and Lefer, A. M.
Lehr, H. A., Hübner, C., Finckh, B., Angermüller, S., Nolte, D., Beisiegel, U., Kohlschütter, A., and Messmer, K. Role of leukotrienes in leukocyte adhesion following systemic administration of oxidatively modified human low density lipoprotein in hamsters. 9.
Lembo, G. *See* Volpe, M., Tritto, C., de Luca, N., Mele, A. F., Lembo, G., Rubattu, S., Romano, M., de Campora, P., Enea, I., Ricciardelli, B., Trimarco, B., and Condorelli, M.
Lentz, S. R., and Sadler, J. E. Inhibition of thrombomodulin surface expression and protein C activation by the thrombogenic agent homocysteine. 1906.
Leonard, J. L. *See* Abend, S. L., Fang, S. L., Alex, S., Braverman, L. E., and Leonard, J. L.
Leroy-Viard, K. *See* Tutois, S., Montagutelli, X., Da Silva, V., Jouault, H., Rouyer-Fessard, P., Leroy-Viard, K., Guénet, J.-L., Nordmann, Y., Beuzard, Y., and Deybach, J.-C.
Leser, H.-G. *See* Kuis, W., Villiger, P. M., Leser, H.-G., and Lotz, M.
Lesoine, G. A. *See* Soleimani, M., Lesoine, G. A., Bergman, J. A., and McKinney, T. D.
Letts, L. G. *See* Gundel, R. H., Wegner, C. D., Torcellini, C. A., Clarke, C. C., Haynes, N., Rothlein, R., Smith, C. W., and Letts, L. G.
Letvin, N. L. *See* Reimann, K. A., Snyder, G. B., Chalifoux, L. V., Waite, B. C. D., Miller, M. D., Yamamoto, H., Spertini, O., and Letvin, N. L.
Leuven, J. A. G. *See* de Knijff, P., Van den Maagdenberg, A. M. J. M., Stalenhoef, A. F. H., Leuven, J. A. G., Demacker, P. N. M., Kuyt, L. P., Frants, R. R., and Havekes, L. M.
Levi, M., Hack, C. E., de Boer, J. P., Brandjes, D. P. M., Büller, H. R., and ten Cate, J. W. Reduction of contact activation related fibrinolytic activity in factor XII deficient patients. Further evidence for the role of the contact system in fibrinolysis in vivo. 1155.
Levinson, A. I. *See* Indik, Z., Kelly, C., Chien, P., Levinson, A. I., and Schreiber, A. D.
Levitt, L. J., Nagler, A., Lee, F., Abrams, J., Shatsky, M., and Thompson, D. Production of granulocyte/macrophage–colony-stimulating factor by human natural killer cells. Modulation by the p75 subunit of the interleukin 2 receptor and by the CD2 receptor. 67.
Levran, O., Desnick, R. J., and Schuchman, E. H. Niemann-Pick type B disease. Identification of a single codon deletion in the acid sphingomyelinase gene and genotype/phenotype correlations in type A and B patients. 806.
Levy, Y., Tsapis, A., and Brouet, J.-C. Interleukin-6 antisense oligonucleotides inhibit the growth of human myeloma cell lines. 696.
Lew, D. B., and Rattazzi, M. C. Mitogenic effect of lysosomal hydrolases on bovine tracheal myocytes in culture. 1969.
Lewin-Velvert, U. *See* Sehayek, E., Lewin-Velvert, U., Chajek-Shaul, T., and Eisenberg, S.
Lewis, D. E. *See* Mahoney, S. E., Duvic, M., Nickoloff, B. J., Minshall, M., Smith, L. C., Griffiths, C. E. M., Paddock, S. W., and Lewis, D. E.
Lewis, S. F. *See* Haller, R. G., Henriksson, K. G., Jorfeldt, L., Hultman, E., Wibom, R., Sahlin, K., Areskog, N.-H., Gunder, M., Ayyad, K., Blomqvist, C. G., Hall, R. E., Thuillier, P., Kennaway, N. G., and Lewis, S. F.
Li, P. *See* Meggs, L. G., Huang, H., Li, P., Capasso, J. M., and Anversa, P.
Li, Q. *See* Keung, E. C., and Li, Q.
Liang, Y. *See* Boden, G., Jadali, F., White, J., Liang, Y., Mozzoli, M., Chen, X., Coleman, E., and Smith, C.
Lianos, E. A., Bresnahan, B. A., and Pan, C. Mesangial cell immune injury. Synthesis, origin, and role of eicosanoids. 623.
Liao, F., Berliner, J. A., Mehrabian, M., Navab, M., Demer, L. L., Lusis, A. J., and Fogelman, A. M. Correction. 721.
Lichtenstein, A. Mechanism of mammalian cell lysis mediated by peptide defensins. Evidence for an initial alteration of the plasma membrane. 93.
Lien, Y.-H. H., Shapiro, J. I., and Chan, L. Study of brain electrolytes and organic osmolytes during correction of chronic hyponatremia. Implications for the pathogenesis of central pontine myelinolysis. 303.
Lillioja, S. *See* Swinburn, B. A., Nyomba, B. L., Saad, M. F., Zurlo, F., Raz, I., Knowler, W. C., Lillioja, S., Bogardus, C., and Ravussin, E.
Limaye, A. P., Abrams, J. S., Silver, J. E., Awadzi, K., Francis, H. F., Ottesen, E. A., and Nutman, T. B. Interleukin-5 and the posttreatment eosinophilia in patients with onchocerciasis. 1418.
Lin, D., Gitelman, S. E., Saenger, P., and Miller, W. L. Normal genes for the cholesterol side chain cleavage enzyme, P450scc, in congenital lipoid adrenal hyperplasia. 1955.
Lindner, V. *See* Majesky, M. W., Lindner, V., Twardzik, D. R., Schwartz, S. M., and Reidy, M. A.
Linton, M. F., Gish, R., Hubl, S. T., Bütler, E., Esquivel, C., Bry, W. I., Boyles, J. K., Wardell, M. R., and Young, S. G. Phenotypes of apolipoprotein B and apolipoprotein E after liver transplantation. 270.
Lipsky, P. E. *See* Splawski, J. B., and Lipsky, P. E.
Liu, E., Goldhaber, J. I., and Weiss, J. N. Effects of lysophosphatidylcholine on electrophysiological properties and excitation–contraction coupling in isolated guinea pig ventricular myocytes. 1819.
Liu, J.-n., and Gurewich, V. A comparative study of the promotion of tissue plasminogen activator and pro-urokinase–induced plasminogen activation by fragments D and E-2 of fibrin. 2012.
Locksley, R. M. *See* Bernstein, M. S., Tong-Starksen, S. E., and Locksley, R. M.
Loegering, D. A. *See* Barker, R. L., Gundel, R. H., Gleich, G. J., Checkel, J. L., Loegering, D. A., Pease, L. R., and Hamann, K. J.
Loftus, J. C. *See* Gawaz, M. P., Loftus, J. C., Bajt, M. L., Frojmovic, M. M., Plow, E. F., and Ginsberg, M. H.
Lohmann-Matthes, M.-L. *See* Roesler, J., Hockertz, S., Vogt, B., and Lohmann-Matthes, M.-L.
Longmore, W. J. *See* Gregory, T. J., Longmore, W. J., Moxley, M. A., Whitsett, J. A., Reed, C. R., Fowler, A. A., III, Hudson, L. D., Maunder, R. J., Crim, C., and Hyers, T. M.
Loon, N. *See* Myers, B. D., Nelson, R. G., Williams, G. W., Bennett, P. H., Hardy, S. A., Berg, R. L., Loon, N., Knowler, W. C., and Mitch, W. E.
Lopez, R. *See* Ruiz, P., Gomez, F., King, M., Lopez, R., Darby, C., and Schreiber, A. D.
Loscalzo, J. *See* Cooke, J. P., Rossitch, E., Jr., Andon, N. A., Loscalzo, J., and Dzau, V. J.
Loskutoff, D. J. *See* Sawdey, M. S., and Loskutoff, D. J.
Lottspeich, F. *See* Hailat, N., Keim, D. R., Melhem, R. F., Zhu, X.-x., Eckerskorn, C., Brodeur, G. M., Reynolds, C. P., Seeger, R. C., Lottspeich, F., Strahler, J. R., and Hanash, S. M.
Lotz, M. *See* Kuis, W., Villiger, P. M., Leser, H.-G., and Lotz, M.
Lu, S. C., Kuhlenkamp, J., Garcia-Ruiz, C., and Kaplowitz, N. Hormone-mediated down-regulation of hepatic glutathione synthesis in the rat. 260.
Lucas, A. H., Langley, R. J., Granoff, D. M., Nahm, M. H., Kitamura, M. Y., and Scott, M. G. An idiotypic marker associated with a

germ-line encoded κ light chain variable region that predominates the vaccine-induced human antibody response to the *Haemophilus influenzae* b polysaccharide. 1811.
— *See* Silverman, G. J., and Lucas, A. H.
Lucey, D. R. *See* Berzofsky, J. A., Pendleton, C. D., Clerici, M., Ahlers, J., Lucey, D. R., Putney, S. D., and Shearer, G. M.
Lue, C. *See* Fujihashi, K., McGhee, J. R., Lue, C., Beagley, K. W., Taga, T., Hirano, T., Kishimoto, T., Mestecky, J., and Kiyono, H.
Lujan, R. *See* Chandrashekar, R., Masood, K., Alvarez, R. M., Ogunrinade, A. F., Lujan, R., Richards, F. O., Jr., and Weil, G. J.
Lujan-Trangay, A. *See* Freedman, D. O., Lujan-Trangay, A., Steel, C., Gonzalez-Peralta, C., and Nutman, T. B.

M

Ma, X.-L., Tsao, P. S., and Lefer, A. M. Antibody to CD-18 exerts endothelial and cardiac protective effects in myocardial ischemia and reperfusion. 1237.
Maarschalkerweerd, W. W. A. v. *See* Gans, R. O. B., Bilo, H. J. G., Maarschalkerweerd, W. W. A. v., Heine, R. J., Nauta, J. J. P., and Donker, A. J. M.
Macchia, D. *See* Del Prete, G. F., de Carli, M., Mastromauro, C., Biagiotti, R., Macchia, D., Falagiani, P., Ricci, M., and Romagnani, S.
Madara, J. L. *See* Parkos, C. A., Delp, C., Arnaout, M. A., and Madara, J. L.
Madhun, Z. T., Goldthwait, D. A., McKay, D., Hopfer, U., and Douglas, J. G. An epoxygenase metabolite of arachidonic acid mediates angiotensin II-induced rises in cytosolic calcium in rabbit proximal tubule epithelial cells. 456.
Magness, R. R. *See* Shaul, P. W., Kinane, B., Farrar, M. A., Buja, L. M., and Magness, R. R.
Mahan, L. C. *See* Burch, R. M., and Mahan, L. C.
Mahoney, S. E., Duvic, M., Nickoloff, B. J., Minshall, M., Smith, L. C., Griffiths, C. E. M., Paddock, S. W., and Lewis, D. E. Human immunodeficiency virus (HIV) transcripts identified in HIV-related psoriasis and Kaposi's sarcoma lesions. 174.
Maio, M., Altomonte, M., Tatake, R., Zeff, R. A., and Ferrone, S. Reduction in susceptibility to natural killer cell–mediated lysis of human FO-1 melanoma cells after induction of HLA class I antigen expression by transfection with B_2m gene. 282.
Majesky, M. W., Lindner, V., Twardzik, D. R., Schwartz, S. M., and Reidy, M. A. Production of transforming growth factor β_1 during repair of arterial injury. 904.
Malloy, M. J. *See* Hardman, D. A., Pullinger, C. R., Hamilton, R. L., Kane, J. P., and Malloy, M. J.
Manaster, J. *See* Coetzer, T. L., Sahr, K., Prchal, J., Blacklock, H., Peterson, L., Koler, R., Doyle, J., Manaster, J., and Palek, J.
Manganiello, V. C. *See* Movsesian, M. A., Smith, C. J., Krall, J., Bristow, M. R., and Manganiello, V. C.
Mann, C. J., Yen, F. T., Grant, A. M., and Bihain, B. E. Mechanism of plasma cholesteryl ester transfer in hypertriglyceridemia. 2059.
Mann, K. *See* Hoermann, R., Schumm-Draeger, P.-M., Rehbach, K., and Mann, K.
Manns, M. P., Griffin, K. J., Sullivan, K. F., and Johnson, E. F. LKM-1 autoantibodies recognize a short linear sequence in P450IID6, a cytochrome P-450 monooxygenase. 1370.
Mao-Qiang, M. *See* Holleran, W. M., Mao-Qiang, M., Gao, W. N., Menon, G. K., Elias, P. M., and Feingold, K. R.
Marban, E. *See* Corretti, M. C., Koretsune, Y., Kusuoka, H., Chacko, V. P., Zweier, J. L., and Marban, E.
Marcelli, C. *See* Bataille, R., Chappard, D., Marcelli, C., Dessauw, P., Baldet, P., Sany, J., and Alexandre, C.
Marcus, A. J., Safier, L. B., Hajjar, K. A., Ullman, H. L., Islam, N., Broekman, M. J., and Eiroa, A. M. Inhibition of platelet function by an aspirin-insensitive endothelial cell ADPase. Thromboregulation by endothelial cells. 1690.
Margulies, K. B., Perrella, M. A., McKinley, L. J., and Burnett, J. C., Jr. Angiotensin inhibition potentiates the renal responses to neutral endopeptidase inhibition in dogs with congestive heart failure. 1636.
Marie, P. J., de Vernejoul, M. C., Connes, D., and Hott, M. Decreased DNA synthesis by cultured osteoblastic cells in eugonadal osteoporotic men with defective bone formation. 1167.
Marinelli, W. A. *See* Snyder, L. S., Hertz, M. I., Peterson, M. S., Harmon, K. R., Marinelli, W. A., Henke, C. A., Greenheck, J. R., Chen, B., and Bitterman, P. B.
Marino, C. R., Matovcik, L. M., Gorelick, F. S., and Cohn, J. A. Correction. 1433.
—, **Matovcik, L. M., Gorelick, F. S., and Cohn, J. A.** Localization of the cystic fibrosis transmembrane conductance regulator in pancreas. 712.
Marotte, F. *See* Samuel, J. L., Barrieux, A., Dufour, S., Dubus, I., Contard, F., Koteliansky, V., Farhadian, F., Marotte, F., Thiéry, J.-P., and Rappaport, L.
Marsden, P. A. *See* Kourembanas, S., Marsden, P. A., McQuillan, L. P., and Faller, D. V.
Martin, M. L., and Jensen, M. D. Effects of body fat distribution on regional lipolysis in obesity. 609.
Martin, T. R. *See* Takeishi, T., Martin, T. R., Katona, I. M., Finkelman, F. D., and Galli, S. J.
Martin, W. H., III, Spina, R. J., Korte, E., Yarasheski, K. E., Angelopoulos, T. J., Nemeth, P. M., and Saffitz, J. E. Mechanisms of impaired exercise capacity in short duration experimental hyperthyroidism. 2047.
Martin, W. J., II. *See* Pottratz, S. T., Paulsrud, J., Smith, J. S., and Martin, W. J., II
Martinussen, H. J. *See* Waldenström, A., Martinussen, H. J., Gerdin, B., and Hällgren, R.
Marumo, F. *See* Kuwahara, M., Shi, L.-B., Marumo, F., and Verkman, A. S.
Marusic, E. T. *See* Bonilla, S., Goecke, I. A., Bozzo, S., Alvo, M., Michea, L., and Marusic, E. T.
Maruyama, I. *See* Kitajima, I., Yamamoto, K., Sato, K., Nakajima, Y., Nakajima, T., Maruyama, I., Osame, M., and Nishioka, K.
Masood, K. *See* Chandrashekar, R., Masood, K., Alvarez, R. M., Ogunrinade, A. F., Lujan, R., Richards, F. O., Jr., and Weil, G. J.
Massacesi, L., Castigli, E., Vergelli, M., Olivotto, J., Abbamondi, A. L., Sarlo, F., and Amaducci, L. Immunosuppressive activity of 13-*cis*-retinoic acid and prevention of experimental autoimmune encephalomyelitis in rats. 1331.
Massey, C. V., Kohout, T. A., Gaa, S. T., Lederer, W. J., and Rogers, T. B. Molecular and cellular actions of platelet-activating factor in rat heart cells. 2106.
Massie, B. M. *See* Minotti, J. R., Christoph, I., Oka, R., Weiner, M. W., Wells, L., and Massie, B. M.
Mastrangeli, A. *See* Jaffe, H. A., Buhl, R., Mastrangeli, A., Holroyd, K. J., Saltini, C., Czerski, D., Jaffe, H. S., Kramer, S., Sherwin, S., and Crystal, R. G.
Mastromauro, C. *See* Del Prete, G. F., de Carli, M., Mastromauro, C., Biagiotti, R., Macchia, D., Falagiani, P., Ricci, M., and Romagnani, S.
Matovcik, L. M. *See* Marino, C. R., Matovcik, L. M., Gorelick, F. S., and Cohn, J. A.
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— *See* Fasano, M. B., Cousart, S., Neal, S., and McCall, C. E.
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McDonald, D. M. *See* Piedimonte, G., McDonald, D. M., and Nadel, J. A.
McFarland, J. *See* Kekomaki, R., Dawson, B., McFarland, J., and Kunicki, T. J.
McGhee, J. R. *See* Fujihashi, K., McGhee, J. R., Lue, C., Beagley, K. W., Taga, T., Hirano, T., Kishimoto, T., Mestecky, J., and Kiyono, H.
McIntosh, J. R. *See* Molitoris, B. A., Geerdes, A., and McIntosh, J. R.
McKay, D. *See* Madhun, Z. T., Goldthwait, D. A., McKay, D., Hopfer, U., and Douglas, J. G.
McKinley, L. J. *See* Margulies, K. B., Perrella, M. A., McKinley, L. J., and Burnett, J. C., Jr.
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McMillan, M. *See* Ikenouchi, H., Kohmoto, O., McMillan, M., and Barry, W. H.
McPhail, L. C. *See* Agwu, D. E., McPhail, L. C., Sozzani, S., Bass, D. A., and McCall, C. E.
McPherson, J. A. *See* Parrilla, R., Mixson, A. J., McPherson, J. A., McClaskey, J. H., and Weintraub, B. D.
McQuillan, L. P. *See* Kourembanas, S., Marsden, P. A., McQuillan, L. P., and Faller, D. V.
Meager, A. *See* Kurane, I., Innis, B. L., Nimmannitya, S., Nisalak, A., Meager, A., Janus, J., and Ennis, F. A.
Mecham, R. P. *See* Hinek, A., Mecham, R. P., Keeley, F., and Rabinovitch, M.
Meggs, L. G., Huang, H., Li, P., Capasso, J. M., and Anversa, P. Chronic nonocclusive coronary artery constriction in rats. β-Adrenoreceptor signal transduction and ventricular failure. 1940.
Meier, P. J. *See* Jacquemin, E., Hagenbuch, B., Stieger, B., Wolkoff, A. W., and Meier, P. J.
Mele, A. F. *See* Volpe, M., Tritto, C., de Luca, N., Mele, A. F., Lembo, G., Rubattu, S., Romano, M., de Campora, P., Enea, I., Ricciardelli, B., Trimarco, B., and Condorelli, M.
Melhem, R. F. *See* Hailat, N., Keim, D. R., Melhem, R. F., Zhu, X.-x., Eckerskorn, C., Brodeur, G. M., Reynolds, C. P., Seeger, R. C., Lottspeich, F., Strahler, J. R., and Hanash, S. M.
Menegazzi, R. *See* Dobrina, A., Menegazzi, R., Carlos, T. M., Nardon, E., Cramer, R., Zacchi, T., Harlen, J. M., and Patriarca, P.
Menick, D. R. *See* Block, N. E., Menick, D. R., Robinson, K. A., and Buse, M. G.
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Mercadier, J.-J. *See* Boheler, K. R., Carrier, L., de la Bastie, D., Allen, P. D., Komajda, M., Mercadier, J.-J., and Schwartz, K.
Merigan, T. C. *See* Holodniy, M., Katzenstein, D. A., Israelski, D. M., and Merigan, T. C.
Mertz, A. K. H., Batsford, S. R., Curschellas, E., Kist, M. J., and Gondolf, K. B. Cationic yersinia antigen-induced chronic allergic arthritis in rats. A model for reactive arthritis in humans. 632.
Messmer, K. *See* Lehr, H. A., Hübner, C., Finckh, B., Angermüller, S., Nolte, D., Beisiegel, U., Kohlschütter, A., and Messmer, K.
Mestecky, J. *See* Fujihashi, K., McGhee, J. R., Lue, C., Beagley, K. W., Taga, T., Hirano, T., Kishimoto, T., Mestecky, J., and Kiyono, H.
Meyers, C. M., and Kelly, C. J. Effector mechanisms in organ-specific autoimmunity. I. Characterization of a $CD8^+$ T cell line that mediates murine interstitial nephritis. 408.
Michael, L. H. *See* Black, F. M., Packer, S. E., Parker, T. G., Michael, L. H., Roberts, R., Schwartz, R. J., and Schneider, M. D.
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Miller, M. D. *See* Reimann, K. A., Snyder, G. B., Chalifoux, L. V., Waite, B. C. D., Miller, M. D., Yamamoto, H., Spertini, O., and Letvin, N. L.
Miller, R. T. *See* Moe, O. W., Miller, R. T., Horie, S., Cano, A., Preisig, P. A., and Alpern, R. J.
Miller, W. L. *See* Lin, D., Gitelman, S. E., Saenger, P., and Miller, W. L.
Minotti, J. R., Christoph, I., Oka, R., Weiner, M. W., Wells, L., and Massie, B. M. Impaired skeletal muscle function in patients with congestive heart failure. Relationship to systemic exercise performance. 2077.
Minshall, M. *See* Mahoney, S. E., Duvic, M., Nickoloff, B. J., Minshall, M., Smith, L. C., Griffiths, C. E. M., Paddock, S. W., and Lewis, D. E.
Missale, G. *See* Ferrari, C., Bertoletti, A., Penna, A., Cavalli, A., Valli, A., Missale, G., Pilli, M., Fowler, P., Giuberti, T., Chisari, F. V., and Fiaccadori, F.
Misset, B. *See* Munoz, C., Carlet, J., Fitting, C., Misset, B., Blériot, J.-P., and Cavaillon, J.-M.
Mitch, W. E. *See* Myers, B. D., Nelson, R. G., Williams, G. W., Bennett, P. H., Hardy, S. A., Berg, R. L., Loon, N., Knowler, W. C., and Mitch, W. E.
Mitjavila, M.-T., Le Couedic, J.-P., Casadevall, N., Navarro, S., Villeval, J.-L., Dubart, A., and Vainchenker, W. Autocrine stimulation by erythropoietin and autonomous growth of human erythroid luekemic cells in vitro. 789.
Mitsuya, H. *See* Shimada, T., Fujii, H., Mitsuya, H., and Nienhuis, A. W.
Mixson, A. J. *See* Parrilla, R., Mixson, A. J., McPherson, J. A., McClaskey, J. H., and Weintraub, B. D.
Moake, J. L. *See* Kroll, M. H., Harris, T. S., Moake, J. L., Handin, R. I., and Schafer, A. I.
Moe, O. W., Miller, R. T., Horie, S., Cano, A., Preisig, P. A., and Alpern, R. J. Differential regulation of Na/H antiporter by acid in renal epithelial cells and fibroblasts. 1703.
Mohler, M. A. *See* Darbonne, W. C., Rice, G. C., Mohler, M. A., Apple, T., Hébert, C. A., Valente, A. J., and Baker, J. B.
Molitoris, B. A., Geerdes, A., and McIntosh, J. R. Dissociation and redistribution of Na^+,K^+-ATPase from its surface membrane actin cytoskeletal complex during cellular ATP depletion. 462.
Montagutelli, X. *See* Tutois, S., Montagutelli, X., Da Silva, V., Jouault, H., Rouyer-Fessard, P., Leroy-Viard, K., Guénet, J.-L., Nordmann, Y., Beuzard, Y., and Deybach, J.-C.
Montrose-Rafizadeh, C. *See* Hamosh, A., Trapnell, B. C., Zeitlin, P. L., Montrose-Rafizadeh, C., Rosenstein, B. J., Crystal, R. G., and Cutting, G. R.
Moore, M. C., Cherrington, A. D., Cilne, G., Pagliassotti, M. J., Jones, E. M., Neal, D. W., Badet, C., and Shulman, G. I. Sources of carbon for hepatic glycogen synthesis in the conscious dog. 578.
Mordes, J. P. *See* Greiner, D. L., Shultz, L. D., Rossini, A. A., Mordes, J. P., Handler, E. S., and Rajan, T. V.
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Mori, N. *See* Gotoda, T., Yamada, N., Kawamura, M., Kozaki, K., Mori, N., Ishibashi, S., Shimano, H., Takaku, F., Yazaki, Y., Furuichi, Y., and Murase, T.
Morishima, T. *See* Wakita, T., Kakumu, S., Shibata, M., Yoshioka, K., Ito, Y., Shinagawa, T., Ishikawa, T., Takayanagi, M., and Morishima, T.
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Moser, H. W. *See* Hoefler, G., Paschke, E., Hoefler, S., Moser, A. B., and Moser, H. W.
Mott, D. M. *See* Nyomba, B. L., Brautigan, D. L., Schlender, K. K., Wang, W., Bogardus, C., and Mott, D. M.
Movsesian, M. A., Smith, C. J., Krall, J., Bristow, M. R., and Manganiello, V. C. Sarcoplasmic reticulum-associated cyclic adenosine 5′-monophosphate phosphodiesterase activity in normal and failing human hearts. 15.
Moxley, M. A. *See* Gregory, T. J., Longmore, W. J., Moxley, M. A., Whitsett, J. A., Reed, C. R., Fowler, A. A., III, Hudson, L. D., Maunder, R. J., Crim, C., and Hyers, T. M.
Mozzoli, M. *See* Boden, G., Jadali, F., White, J., Liang, Y., Mozzoli, M., Chen, X., Coleman, E., and Smith, C.
Mukherjee, D., and Sen, S. Alteration of collagen phenotypes in ischemic cardiomyopathy. 1141.
Mulligan, M. S., Varani, J., Dame, M. K., Lane, C. L., Smith, C. W., Anderson, D. C., and Ward, P. A. Role of endothelial-leukocyte adhesion molecule 1 (ELAM-1) in neutrophil-mediated lung injury in rats. 1396.

Mulligan, R. *See* Berger, H. A., Anderson, M. P., Gregory, R. J., Thompson, S., Howard, P. W., Maurer, R. A., Mulligan, R., Smith, A. E., and Welsh, M. J.

Mundlos, S. *See* Wright, E. M., Turk, E., Zabel, B., Mundlos, S., and Dyer, J.

Munoz, C., Carlet, J., Fitting, C., Misset, B., Blériot, J.-P., and Cavaillon, J.-M. Dysregulation of in vitro cytokine production by monocytes during sepsis. 1747.

Murase, T. *See* Gotoda, T., Yamada, N., Kawamura, M., Kozaki, K., Mori, N., Ishibashi, S., Shimano, H., Takaku, F., Yazaki, Y., Furuichi, Y., and Murase, T.

Myers, B. D., Nelson, R. G., Williams, G. W., Bennett, P. H., Hardy, S. A., Berg, R. L., Loon, N., Knowler, W. C., and Mitch, W. E. Glomerular function in Pima Indians with noninsulin-dependent diabetes mellitus of recent onset. 524.

Myers, B. M., Prendergast, F. G., Holman, R., Kuntz, S. M., and LaRusso, N. F. Alterations in the structure, physicochemical properties, and pH of hepatocyte lysosomes in experimental iron overload. 1207.

Myers, S. R., Biggers, D. W., Neal, D. W., and Cherrington, A. D. Intraportal glucose delivery enhances the effects of hepatic glucose load on net hepatic glucose uptake in vivo. 158.

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Nackano, K., Swindle, M. M., Spinale, F., Ishihara, K., Kanazawa, S., Smith, A., Biederman, R. W. W., Clamp, L., Hamada, Y., Zile, M. R., Carabello, B. A. Correction. 723.

Nadel, J. A. *See* Piedimonte, G., McDonald, D. M., and Nadel, J. A.

Nagayama, Y., Wadsworth, H. L., Russo, D., Chazenbalk, G. D., and Rapoport, B. Binding domains of stimulatory and inhibitory thyrotropin (TSH) receptor autoantibodies determined with chimeric TSH-lutropin/chorionic gonadotropin receptors. 336.

Nagler, A. *See* Levitt, L. J., Nagler, A., Lee, F., Abrams, J., Shatsky, M., and Thompson, D.

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Nakajima, T. *See* Kitajima, I., Yamamoto, K., Sato, K., Nakajima, Y., Nakajima, T., Maruyama, I., Osame, M., and Nishioka, K.

Nakajima, Y. *See* Kitajima, I., Yamamoto, K., Sato, K., Nakajima, Y., Nakajima, T., Maruyama, I., Osame, M., and Nishioka, K.

Nakamura, T. *See* Kharbanda, S., Nakamura, T., Stone, R., Hass, R., Bernstein, S., Datta, R., Sukhatme, V. P., and Kufe, D.

Nakanishi, T. *See* Uchida, S., Nakanishi, T., Kwon, H. M., Preston, A. S., and Handler, J. S.

Nakayama, Y. *See* Radovick, S., Ticknor, C. M., Nakayama, Y., Notides, A. C., Rahman, A., Weintraub, B. D., Cutler, G. B., Jr., and Wondisford, F. E.

Nardon, E. *See* Dobrina, A., Menegazzi, R., Carlos, T. M., Nardon, E., Cramer, R., Zacchi, T., Harlen, J. M., and Patriarca, P.

Nath, K. A. *See* Salahudeen, A. K., Clark, E. C., and Nath, K. A.

Nauta, J. J. P. *See* Gans, R. O. B., Bilo, H. J. G., Maarschalkerweerd, W. W. A. v., Heine, R. J., Nauta, J. J. P., and Donker, A. J. M.

Navab, M., Imes, S. S., Hama, S. Y., Hough, G. P., Ross, L. A., Bork, R. W., Valente, A. J., Berliner, J. A., Drinkwater, D. C., Laks, H., and Fogelman, A. M. Monocyte transmigration induced by modification of low density lipoprotein in cocultures of human aortic wall cells is due to induction of monocyte chemotactic protein 1 synthesis and is abolished by high density lipoprotein. 2039.

Navarro, S. *See* Mitjavila, M.-T., Le Couedic, J.-P., Casadevall, N., Navarro, S., Villeval, J.-L., Dubart, A., and Vainchenker, W.

Neal, D. W. *See* Moore, M. C., Cherrington, A. D., Cilne, G., Pagliassotti, M. J., Jones, E. M., Neal, D. W., Badet, C., and Shulman, G. I.

— *See* Myers, S. R., Biggers, D. W., Neal, D. W., and Cherrington, A. D.

Neal, S. *See* Fasano, M. B., Cousart, S., Neal, S., and McCall, C. E.

Nelken, N. A., Coughlin, S. R., Gordon, D., and Wilcox, J. N. Monocyte chemoattractant protein-1 in human atheromatous plaques. 1121.

Nelson, R. G. *See* Myers, B. D., Nelson, R. G., Williams, G. W., Bennett, P. H., Hardy, S. A., Berg, R. L., Loon, N., Knowler, W. C., and Mitch, W. E.

Nemeth, P. M. *See* Martin, W. H., III, Spina, R. J., Korte, E., Yarasheski, K. E., Angelopoulos, T. J., Nemeth, P. M., and Saffitz, J. E.

Nibert, M. L., Furlong, D. B., and Fields, B. N. Mechanisms of viral pathogenesis. Distinct forms of reoviruses and their roles during replication in cells and host. 727.

Nichols, J. E. *See* Salkind, A. R., Nichols, J. E., and Roberts, N. J., Jr.

Nicholson, R. *See* Gupta, A. K., Kirchner, K. A., Nicholson, R., Adams, J. G., III, Schechter, A. N., Noguchi, C. T., and Steinberg, M. H.

Nickoloff, B. J. *See* Mahoney, S. E., Duvic, M., Nickoloff, B. J., Minshall, M., Smith, L. C., Griffiths, C. E. M., Paddock, S. W., and Lewis, D. E.

Nienhuis, A. W. *See* Shimada, T., Fujii, H., Mitsuya, H., and Nienhuis, A. W.

Niho, Y. *See* Akashi, K., Shibuya, T., Harada, M., Takamatsu, Y., Uike, N., Eto, T., and Niho, Y.

Nilsson, E. *See* Lantz, M., Thysell, H., Nilsson, E., and Olsson, I.

Nimmannitya, S. *See* Kurane, I., Innis, B. L., Nimmannitya, S., Nisalak, A., Meager, A., Janus, J., and Ennis, F. A.

Nisalak, A. *See* Kurane, I., Innis, B. L., Nimmannitya, S., Nisalak, A., Meager, A., Janus, J., and Ennis, F. A.

Nishioka, K. *See* Kitajima, I., Yamamoto, K., Sato, K., Nakajima, Y., Nakajima, T., Maruyama, I., Osame, M., and Nishioka, K.

Noble, P. W. *See* Carré, P. C., Mortenson, R. L., King, T. E., Jr., Noble, P. W., Sable, C. L., and Riches, D. W. H.

Noguchi, C. T. *See* Gupta, A. K., Kirchner, K. A., Nicholson, R., Adams, J. G., III, Schechter, A. N., Noguchi, C. T., and Steinberg, M. H.

Nolte, D. *See* Lehr, H. A., Hübner, C., Finckh, B., Angermüller, S., Nolte, D., Beisiegel, U., Kohlschütter, A., and Messmer, K.

Nordmann, Y. *See* Tutois, S., Montagutelli, X., Da Silva, V., Jouault, H., Rouyer-Fessard, P., Leroy-Viard, K., Guénet, J.-L., Nordmann, Y., Beuzard, Y., and Deybach, J.-C.

Nordström, I. *See* Quiding, M., Nordström, I., Kilander, A., Andersson, G., Hanson, L. Å., Holmgren, J., and Czerkinsky, C.

Norton, J. A. *See* Alexander, H. R., Sheppard, B. C., Jensen, J. C., Langstein, H. N., Buresh, C. M., Venzon, D., Walker, E. C., Fraker, D. L., Stovroff, M. C., and Norton, J. A.

Notides, A. C. *See* Radovick, S., Ticknor, C. M., Nakayama, Y., Notides, A. C., Rahman, A., Weintraub, B. D., Cutler, G. B., Jr., and Wondisford, F. E.

Nuccie, B. L. *See* Ryan, D. H., Nuccie, B. L., Abboud, C. N., and Winslow, J. M.

Nutman, T. B. *See* Freedman, D. O., Lujan-Trangay, A., Steel, C., Gonzalez-Peralta, C., and Nutman, T. B.

— *See* Limaye, A. P., Abrams, J. S., Silver, J. E., Awadzi, K., Francis, H. F., Ottesen, E. A., and Nutman, T. B.

Nyomba, B. L., Brautigan, D. L., Schlender, K. K., Wang, W., Bogardus, C., and Mott, D. M. Deficiency in phosphorylase phosphatase activity despite elevated protein phosphatase type-1 catalytic subunit in skeletal muscle from insulin-resistant subjects. 1540.

— *See* Swinburn, B. A., Nyomba, B. L., Saad, M. F., Zurlo, F., Raz, I., Knowler, W. C., Lillioja, S., Bogardus, C., and Ravussin, E.

O

O'Donoghue, D. J., Darvill, A., and Ballardie, F. W. Mesangial cell autoantigens in immunoglobulin A nephropathy and Henoch-Schönlein purpura. 1522.

Oesterlin, M. *See* Rajendran, V. M., Oesterlin, M., and Binder, H. J.

Ogunrinade, A. F. *See* Chandrashekar, R., Masood, K., Alvarez, R. M., Ogunrinade, A. F., Lujan, R., Richards, F. O., Jr., and Weil, G. J.

Oka, R. *See* Minotti, J. R., Christoph, I., Oka, R., Weiner, M. W., Wells, L., and Massie, B. M.

Olee, T., Yang, P.-M., Siminovitch, K. A., Olsen, N. J., Hillson, J., Wu, J., Kozin, F., Carson, D. A., and Chen, P. P. Molecular basis of an autoantibody-associated restriction fragment length polymorphism that confers susceptibility to autoimmune diseases. 193.

Olefsky, J. M. *See* Kusari, J., Verma, U. S., Buse, J. B., Henry, R. R., and Olefsky, J. M.

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Olsen, N. J. *See* Olee, T., Yang, P.-M., Siminovitch, K. A., Olsen, N. J., Hillson, J., Wu, J., Kozin, F., Carson, D. A., and Chen, P. P.
Olsson, I. *See* Lantz, M., Thysell, H., Nilsson, E., and Olsson, I.
Opal, S. M., Cross, A. S., Sadoff, J. C., Collins, H. H., Kelly, N. M., Victor, G. H., Palardy, J. E., and Bodmer, M. W. Efficacy of antilipopolysaccharide and anti–tumor necrosis factor monoclonal antibodies in a neutropenic rat model of *Pseudomonas* sepsis. 885.
Osame, M. *See* Kitajima, I., Yamamoto, K., Sato, K., Nakajima, Y., Nakajima, T., Maruyama, I., Osame, M., and Nishioka, K.
Otsuka, T., Thacker, J. D., Eaves, C. J., and Hogge, D. E. Differential effects of microenvironmentally presented interleukin 3 versus soluble growth factor on primitive human hematopoietic cells. 417.
Ottesen, E. A. *See* Limaye, A. P., Abrams, J. S., Silver, J. E., Awadzi, K., Francis, H. F., Ottesen, E. A., and Nutman, T. B.
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Pagliassotti, M. J. *See* Moore, M. C., Cherrington, A. D., Cilne, G., Pagliassotti, M. J., Jones, E. M., Neal, D. W., Badet, C., and Shulman, G. I.
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Parkos, C. A., Delp, C., Arnaout, M. A., and Madara, J. L. Neutrophil migration across a cultured intestinal epithelium. Dependence on a CD11b/CD18-mediated event and enhanced efficiency in physiological direction. 1605.
Parras, F. *See* Sáez-Llorens, X., Jafari, H. S., Severien, C., Parras, F., Olsen, K. D., Hansen, E. J., Singer, I. I., and McCracken, G. H., Jr.
Parrilla, R., Mixson, A. J., McPherson, J. A., McClaskey, J. H., and Weintraub, B. D. Characterization of seven novel mutations of the c-erbAβ gene in unrelated kindreds with generalized thyroid hormone resistance. Evidence for two "hot spot" regions of the ligand binding domain. 2123.
Paschke, E. *See* Hoefler, G., Paschke, E., Hoefler, S., Moser, A. B., and Moser, H. W.
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Peterson, L. *See* Coetzer, T. L., Sahr, K., Prchal, J., Blacklock, H., Peterson, L., Koler, R., Doyle, J., Manaster, J., and Palek, J.
Peterson, M. *See* Henke, C., Fiegel, V., Peterson, M., Wick, M., Knighton, D., McCarthy, J., and Bitterman, P.
Peterson, M. S. *See* Snyder, L. S., Hertz, M. I., Peterson, M. S., Harmon, K. R., Marinelli, W. A., Henke, C. A., Greenheck, J. R., Chen, B., and Bitterman, P. B.
Petrides, A. S., Groop, L. C., Riely, C. A., and DeFronzo, R. A. Effect of physiologic hyperinsulinemia on glucose and lipid metabolism in cirrhosis. 561.
Petrie, K. A. *See* Williams, K. J., Petrie, K. A., Brocia, R. W., and Swenson, T. L.
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Piedimonte, G., McDonald, D. M., and Nadel, J. A. Neutral endopeptidase and kininase II mediate glucocorticoid inhibition of neurogenic inflammation in the rat trachea. 40.
Pilli, M. *See* Ferrari, C., Bertoletti, A., Penna, A., Cavalli, A., Valli, A., Missale, G., Pilli, M., Fowler, P., Giuberti, T., Chisari, F. V., and Fiaccadori, F.
Pipers, F. S. *See* Egashira, K., Pipers, F. S., and Morgan, J. P.
Pirola, C. *See* Hongo, T., Kupfer, J., Enomoto, H., Sharifi, B., Giannella-Neto, D., Forrester, J. S., Singer, F. R., Goltzman, D., Hendy, G. N., Pirola, C., Fagin, J. A., and Clemens, T. L.
Plow, E. F. *See* Gawaz, M. P., Loftus, J. C., Bajt, M. L., Frojmovic, M. M., Plow, E. F., and Ginsberg, M. H.
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Porter, J. L. *See* Fine, K. D., Santa Ana, C. A., Porter, J. L., and Fordtran, J. S.
Postigo, A. A. *See* Laffón, A., García-Vicuña, R., Humbría, A., Postigo, A. A., Corbí, A. L., de Landázuri, M. O., and Sánchez-Madrid, F.
Pothoulakis, C., LaMont, J. T., Eglow, R., Gao, N., Rubins, J. B., Theoharides, T. C., and Dickey, B. F. Characterization of rabbit ileal receptors for *Clostridium difficile* toxin A. Evidence for a receptor-coupled G protein. 119.
Potter, B. J. *See* Rand, J. H., Patel, N. D., Schwartz, E., Zhou, S.-L., and Potter, B. J.
Pottratz, S. T., Paulsrud, J., Smith, J. S., and Martin, W. J., II. *Pneumocystis carinii* attachment to cultured lung cells by pneumocystis gp120, a fibronectin binding protein. 403.
Prchal, J. *See* Coetzer, T. L., Sahr, K., Prchal, J., Blacklock, H., Peterson, L., Koler, R., Doyle, J., Manaster, J., and Palek, J.
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Prendergast, F. G. *See* Myers, B. M., Prendergast, F. G., Holman, R., Kuntz, S. M., and LaRusso, N. F.
Preston, A. S. *See* Uchida, S., Nakanishi, T., Kwon, H. M., Preston, A. S., and Handler, J. S.
Prockop, D. J. *See* Kuivaniemi, H., Tromp, G., and Prockop, D. J.
Pullinger, C. R. *See* Hardman, D. A., Pullinger, C. R., Hamilton, R. L., Kane, J. P., and Malloy, M. J.
Purcell, H. *See* Bastani, B., Purcell, H., Hemken, P., Trigg, D., and Gluck, S.
Putney, S. D. *See* Berzofsky, J. A., Pendleton, C. D., Clerici, M., Ahlers, J., Lucey, D. R., Putney, S. D., and Shearer, G. M.

Q

Qiu, S.-M., Wen, G., Hirakawa, N., Soloway, R. D., Hong, N.-K., and Crowther, R. S. Glycochenodeoxycholic acid inhibits calcium

phosphate precipitation in vitro by preventing the transformation of amorphous calcium phosphate to calcium hydroxyapatite. 1265.

Quamme, G. A. *See* Dai, L.-J., and Quamme, G. A.

Quiding, M., Nordström, I., Kilander, A., Andersson, G., Hanson, L. A., Holmgren, J., and Czerkinsky, C. Intestinal immune responses in humans. Oral cholera vaccination induces strong intestinal antibody responses and interferon-γ production and evokes local immunological memory. 143.

Quigley, R., and Baum, M. Effects of growth hormone and insulin-like growth factor I on rabbit proximal convoluted tubule transport. 368.

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Radovick, S., Ticknor, C. M., Nakayama, Y., Notides, A. C., Rahman, A., Weintraub, B. D., Cutler, G. B., Jr., and Wondisford, F. E. Evidence for direct estrogen regulation of the human gonadotropin-releasing hormone gene. 1649.

Rafowicz, A. *See* Allain, J.-P., Dailey, S. H., Laurian, Y., Vallari, D. S., Rafowicz, A., Desai, S. M., and Devare, S. G.

Rahman, A. *See* Radovick, S., Ticknor, C. M., Nakayama, Y., Notides, A. C., Rahman, A., Weintraub, B. D., Cutler, G. B., Jr., and Wondisford, F. E.

Rajan, T. V. *See* Greiner, D. L., Shultz, L. D., Rossini, A. A., Mordes, J. P., Handler, E. S., and Rajan, T. V.

Rajendran, V. M., Oesterlin, M., and Binder, H. J. Sodium uptake across basolateral membrane of rat distal colon. Evidence for Na-H exchange and Na-anion cotransport. 1379.

Rakita, R. M., and Rosen, H. Penicillin-binding protein inactivation by human neutrophil myeloperoxidase. 750.

Ram, J. L. *See* Standley, P. R., Zhang, F., Ram, J. L., Zemel, M. B., and Sowers, J. R.

Ramos, B. F. *See* Zhang, Y., Ramos, B. F., and Jakschik, B. A.

Ramos, R. *See* Benedict, C. R., Ryan, J., Wolitzky, B., Ramos, R., Gerlach, M., Tijburg, P., and Stern, D.

Rand, J. H., Patel, N. D., Schwartz, E., Zhou, S.-L., and Potter, B. J. 150-kD von Willebrand factor binding protein extracted from human vascular subendothelium is type VI collagen. 253.

Rand, T. H., Silberstein, D. S., Kornfeld, H., and Weller, P. F. Human eosinophils express functional interleukin 2 receptors. 825.

Rapoport, B. *See* Nagayama, Y., Wadsworth, H. L., Russo, D., Chazenbalk, G. D., and Rapoport, B.

Rappaport, L. *See* Samuel, J. L., Barrieux, A., Dufour, S., Dubus, I., Contard, F., Koteliansky, V., Farhadian, F., Marotte, F., Thiéry, J.-P., and Rappaport, L.

Rasnick, D. *See* Rosenthal, P. J., Wollish, W. S., Palmer, J. T., and Rasnick, D.

Rattazzi, M. C. *See* Lew, D. B., and Rattazzi, M. C.

Ravussin, E. *See* Swinburn, B. A., Nyomba, B. L., Saad, M. F., Zurlo, F., Raz, I., Knowler, W. C., Lillioja, S., Bogardus, C., and Ravussin, E.

Ray, P. E. *See* Horikoshi, S., McCune, B. K., Ray, P. E., Kopp, J. B., Sporn, M. B., and Klotman, P. E.

Ray, R. *See* Blume, S. W., Snyder, R. C., Ray, R., Thomas, S., Koller, C. A., and Miller, D. M.

Raz, I. *See* Swinburn, B. A., Nyomba, B. L., Saad, M. F., Zurlo, F., Raz, I., Knowler, W. C., Lillioja, S., Bogardus, C., and Ravussin, E.

Reaven, G. M. *See* Sztalryd, C., Azhar, S., and Reaven, G. M.

Récan, D. *See* Chelly, J., Gilgenkrantz, H., Hugnot, J. P., Hamard, G., Lambert, M., Récan, D., Akli, S., Cometto, M., Kahn, A., and Kaplan, J. C.

Reed, C. R. *See* Gregory, T. J., Longmore, W. J., Moxley, M. A., Whitsett, J. A., Reed, C. R., Fowler, A. A., III, Hudson, L. D., Maunder, R. J., Crim, C., and Hyers, T. M.

Refetoff, S. *See* Van Cauter, E., Blackman, J. D., Roland, D., Spire, J.-P., Refetoff, S., and Polonsky, K. S.

Rehbach, K. *See* Hoermann, R., Schumm-Draeger, P.-M., Rehbach, K., and Mann, K.

Reidy, M. A. *See* Majesky, M. W., Lindner, V., Twardzik, D. R., Schwartz, S. M., and Reidy, M. A.

Reimann, K. A., Snyder, G. B., Chalifoux, L. V., Waite, B. C. D., Miller, M. D., Yamamoto, H., Spertini, O., and Letvin, N. L. An activated CD8+ lymphocyte appears in lymph nodes of rhesus monkeys early after infection with Simian immunodeficiency virus. 1113.

Reynolds, C. P. *See* Hailat, N., Keim, D. R., Melhem, R. F., Zhu, X.-x., Eckerskorn, C., Brodeur, G. M., Reynolds, C. P., Seeger, R. C., Lottspeich, F., Strahler, J. R., and Hanash, S. M.

Ricci, M. *See* Del Prete, G. F., de Carli, M., Mastromauro, C., Biagiotti, R., Macchia, D., Falagiani, P., Ricci, M., and Romagnani, S.

Ricciardelli, B. *See* Volpe, M., Tritto, C., de Luca, N., Mele, A. F., Lembo, G., Rubattu, S., Romano, M., de Campora, P., Enea, I., Ricciardelli, B., Trimarco, B., and Condorelli, M.

Rice, G. C. *See* Darbonne, W. C., Rice, G. C., Mohler, M. A., Apple, T., Hébert, C. A., Valente, A. J., and Baker, J. B.

Richards, F. O., Jr. *See* Chandrashekar, R., Masood, K., Alvarez, R. M., Ogunrinade, A. F., Lujan, R., Richards, F. O., Jr., and Weil, G. J.

Riches, D. W. H. *See* Carré, P. C., Mortenson, R. L., King, T. E., Jr., Noble, P. W., Sable, C. L., and Riches, D. W. H.

Richter, E. A. *See* Vaag, A., Skött, P., Damsbo, P., Gall, M.-A., Richter, E. A., and Beck-Nielsen, H.

Riely, C. A. *See* Petrides, A. S., Groop, L. C., Riely, C. A., and DeFronzo, R. A.

Rijken, D. C. *See* de Munk, G. A. W., Groeneveld, E., and Rijken, D. C.

Ritland, S. R. *See* Herrmann, M. A., Hay, I. D., Bartelt, D. H., Jr., Ritland, S. R., Dahl, R. J., Grant, C. S., and Jenkins, R. B.

Rizzo, W. B., and Craft, D. A. Sjögren-Larsson syndrome. Deficient activity of the fatty aldehyde dehydrogenase component of fatty alcohol:NAD^+ oxidoreductase in cultured fibroblasts. 1643.

Roberts, N. J., Jr. *See* Salkind, A. R., Nichols, J. E., and Roberts, N. J., Jr.

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Robillard, J. E. *See* Smith, F. G., Smith, B. A., Guillery, E. N., and Robillard, J. E.

Robinson, K. A. *See* Block, N. E., Menick, D. R., Robinson, K. A., and Buse, M. G.

Rocha-Singh, K. J., Hines, D. K., Honbo, N. Y., and Karliner, J. S. Concanavalin A amplifies both β-adrenergic and muscarinic cholinergic receptor-adenylate cyclase-linked pathways in cardiac myocytes. 760.

—, Honbo, N. Y., and Karliner, J. S. Hypoxia and glucose independently regulate the β-adrenergic receptor-adenylate cyclase system in cardiac myocytes. 204.

Rodan, G. A. *See* Sato, M., Grasser, W., Endo, N., Akins, R., Simmons, H., Thompson, D. D., Golub, E., and Rodan, G. A.

Roesler, J., Hockertz, S., Vogt, B., and Lohmann-Matthes, M.-L. Staphylococci surviving intracellularly in phagocytes from patients suffering from chronic granulomatous disease are killed in vitro by antibiotics encapsulated in liposomes. 1224.

Rogers, C. E. *See* Krauss, J. C., Mayo-Bond, L. A., Rogers, C. E., Weber, K. L., Todd, R. F., III, and Wilson, J. M.

Rogers, T. B. *See* Massey, C. V., Kohout, T. A., Gaa, S. T., Lederer, W. J., and Rogers, T. B.

Roland, D. *See* Van Cauter, E., Blackman, J. D., Roland, D., Spire, J.-P., Refetoff, S., and Polonsky, K. S.

Romagnani, S. *See* Del Prete, G. F., de Carli, M., Mastromauro, C., Biagiotti, R., Macchia, D., Falagiani, P., Ricci, M., and Romagnani, S.

Romano, M. *See* Volpe, M., Tritto, C., de Luca, N., Mele, A. F., Lembo, G., Rubattu, S., Romano, M., de Campora, P., Enea, I., Ricciardelli, B., Trimarco, B., and Condorelli, M.

Romo, G. M. *See* Knowlton, A. A., Eberli, F. R., Brecher, P., Romo, G. M., Owen, A., and Apstein, C. S.

Ronco, P., II. *See* Simon, S., Awdeh, Z., Campbell, R. D., Ronco, P., II, Brink, S. J., Eisenbarth, G. S., Yunis, E. J., and Alper, C. A.

Rood, R. P. *See* Cohen, M. E., Wesolek, J., McCullen, J., Rys-Sikora, K., Pandol, S., Rood, R. P., Sharp, G. W. G., and Donowitz, M.

Rosen, H. *See* Rakita, R. M., and Rosen, H.

Rosen, S. *See* Brezis, M., Heyman, S. N., Dinour, D., Epstein, F. H., and Rosen, S.

Rosen, S. D. *See* Huang, K., Geoffroy, J. S., Singer, M. S., and Rosen, S. D.

Rosenberg, S. M., Berry, G. T., Yandrasitz, J. R., and Grunstein, M. M. Maturational regulation of inositol 1,4,5-trisphosphate metabolism in rabbit airway smooth muscle. 2032.

Rosenstein, B. J. *See* Hamosh, A., Trapnell, B. C., Zeitlin, P. L., Montrose-Rafizadeh, C., Rosenstein, B. J., Crystal, R. G., and Cutting, G. R.

Rosenthal, P. J., Wollish, W. S., Palmer, J. T., and Rasnick, D. Antimalarial effects of peptide inhibitors of a *Plasmodium falciparum* cysteine proteinase. 1467.

Ross, L. A. *See* Navab, M., Imes, S. S., Hama, S. Y., Hough, G. P., Ross, L. A., Bork, R. W., Valente, A. J., Berliner, J. A., Drinkwater, D. C., Laks, H., and Fogelman, A. M.

Rossini, A. A. *See* Greiner, D. L., Shultz, L. D., Rossini, A. A., Mordes, J. P., Handler, E. S., and Rajan, T. V.

Rossitch, E., Jr. *See* Cooke, J. P., Rossitch, E., Jr., Andon, N. A., Loscalzo, J., and Dzau, V. J.

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Rubattu, S. *See* Volpe, M., Tritto, C., de Luca, N., Mele, A. F., Lembo, G., Rubattu, S., Romano, M., de Campora, P., Enea, I., Ricciardelli, B., Trimarco, B., and Condorelli, M.

Rubin, R. L. *See* Burlingame, R. W., and Rubin, R. L.

Rubins, J. B. *See* Pothoulakis, C., LaMont, J. T., Eglow, R., Gao, N., Rubins, J. B., Theoharides, T. C., and Dickey, B. F.

Ruggeri, Z. M. *See* Dent, J. A., Galbusera, M., and Ruggeri, Z. M.

Ruiz, P., Gomez, F., King, M., Lopez, R., Darby, C., and Schreiber, A. D. In vivo glucocorticoid modulation of guinea pig splenic macrophage Fcγ receptors. 149.

Ruoss, S. J., Hartmann, T., and Caughey, G. H. Mast cell tryptase is a mitogen for cultured fibroblasts. 493.

Russo, D. *See* Nagayama, Y., Wadsworth, H. L., Russo, D., Chazenbalk, G. D., and Rapoport, B.

Ryan, D. H., Nuccie, B. L., Abboud, C. N., and Winslow, J. M. Vascular cell adhesion molecule-1 and the integrin VLA-4 mediate adhesion of human B cell precursors to cultured bone marrow adherent cells. 995.

Ryan, J. *See* Benedict, C. R., Ryan, J., Wolitzky, B., Ramos, R., Gerlach, M., Tijburg, P., and Stern, D.

Rymaszewski, M. *See* Sprecher, D. L., Knauer, S. L., Black, D. M., Kaplan, L. A., Akeson, A. A., Dusing, M., Lattier, D., Stein, E. A., Rymaszewski, M., and Wiginton, D. A.

Rys-Sikora, K. *See* Cohen, M. E., Wesolek, J., McCullen, J., Rys-Sikora, K., Pandol, S., Rood, R. P., Sharp, G. W. G., and Donowitz, M.

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Saad, M. F. *See* Swinburn, B. A., Nyomba, B. L., Saad, M. F., Zurlo, F., Raz, I., Knowler, W. C., Lillioja, S., Bogardus, C., and Ravussin, E.

Sabadin, L. *See* Tessari, P., Inchiostro, S., Biolo, G., Vincenti, E., and Sabadin, L.

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Šadžienė, A., Thomas, D. D., Bundoc, V. G., Holt, S. C., and Barbour, A. G. A flagella-less mutant of *Borrelia burgdorferi*. Structural, molecular, and in vitro functional characterization. 82.

Saenger, P. *See* Lin, D., Gitelman, S. E., Saenger, P., and Miller, W. L.

Saenz de Tejada, I. *See* Kim, N., Azadzoi, K. M., Goldstein, I., and Saenz de Tejada, I.

Sáez-Llorens, X., Jafari, H. S., Severien, C., Parras, F., Olsen, K. D., Hansen, E. J., Singer, I. I., and McCracken, G. H., Jr. Enhanced attenuation of meningeal inflammation and brain edema by concomitant administration of anti-CD18 monoclonal antibodies and dexamethasone in experimental *Haemophilus* meningitis. 2003.

Saffitz, J. E. *See* Ford, D. A., Hazen, S. L., Saffitz, J. E., and Gross, R. W.

— *See* Martin, W. H., III, Spina, R. J., Korte, E., Yarasheski, K. E., Angelopoulos, T. J., Nemeth, P. M., and Saffitz, J. E.

Safier, L. B. *See* Marcus, A. J., Safier, L. B., Hajjar, K. A., Ullman, H. L., Islam, N., Broekman, M. J., and Eiroa, A. M.

Sahlin, K. *See* Haller, R. G., Henriksson, K. G., Jorfeldt, L., Hultman, E., Wibom, R., Sahlin, K., Areskog, N.-H., Gunder, M., Ayyad, K., Blomqvist, C. G., Hall, R. E., Thuillier, P., Kennaway, N. G., and Lewis, S. F.

Sahr, K. *See* Coetzer, T. L., Sahr, K., Prchal, J., Blacklock, H., Peterson, L., Koler, R., Doyle, J., Manaster, J., and Palek, J.

Sakai, O. *See* Suzuki, M., Morita, T., Hanaoka, K., Kawaguchi, Y., and Sakai, O.

Sakaue, M., and Hoffman, B. B. Glucocorticoids induce transcription and expression of the α1B adrenergic receptor gene in DTT1 MF-2 smooth muscle cells. 385.

Salahudeen, A. K., Clark, E. C., and Nath, K. A. Hydrogen peroxide-induced renal injury. A protective role for pyruvate in vitro and in vivo. 1886.

Salkind, A. R., Nichols, J. E., and Roberts, N. J., Jr. Suppressed expression of ICAM-1 and LFA-1 and abrogation of leukocyte collaboration after exposure of human mononuclear leukocytes to respiratory syncytial virus in vitro. Comparison with exposure to influenza virus. 505.

Saltini, C. *See* Jaffe, H. A., Buhl, R., Mastrangeli, A., Holroyd, K. J., Saltini, C., Czerski, D., Jaffe, H. S., Kramer, S., Sherwin, S., and Crystal, R. G.

Samuel, J. L., Barrieux, A., Dufour, S., Dubus, I., Contard, F., Koteliansky, V., Farhadian, F., Marotte, F., Thiéry, J.-P., and Rappaport, L. Accumulation of fetal fibronectin mRNAs during the development of rat cardiac hypertrophy induced by pressure overload. 1737.

Sánchez-Madrid, F. *See* Laffón, A., García-Vicuña, R., Humbría, A., Postigo, A. A., Corbí, A. L., de Landázuri, M. O., and Sánchez-Madrid, F.

Sanders, P. W. *See* Chen, P. Y., and Sanders, P. W.

Sands, J. M., and Schrader, D. C. An independent effect of osmolality on urea transport in rat terminal inner medullary collecting ducts. 137.

Santa Ana, C. A. *See* Fine, K. D., Santa Ana, C. A., Porter, J. L., and Fordtran, J. S.

Sany, J. *See* Bataille, R., Chappard, D., Marcelli, C., Dessauw, P., Baldet, P., Sany, J., and Alexandre, C.

Saouaf, R., Takasaki, I., Eastman, E., Chobanian, A. V., and Brecher, P. Fibronectin biosynthesis in the rat aorta in vitro. Changes due to experimental hypertension. 1182.

Sappino, A.-P., Belin, D., Huarte, J., Hirschel-Scholz, S., Saurat, J.-H., and Vassalli, J.-D. Differential protease expression by cutaneous squamous and basal cell carcinomas. 1073.

— *See* Vassalli, J.-D., Sappino, A.-P., and Belin, D.

Sarlo, F. *See* Massacesi, L., Castigli, E., Vergelli, M., Olivotto, J., Abbamondi, A. L., Sarlo, F., and Amaducci, L.

Sato, K. *See* Kitajima, I., Yamamoto, K., Sato, K., Nakajima, Y., Nakajima, T., Maruyama, I., Osame, M., and Nishioka, K.

Sato, M., Grasser, W., Endo, N., Akins, R., Simmons, H., Thompson, D. D., Golub, E., and Rodan, G. A. Bisphosphonate action. Alendronate localization in rat bone and effects on osteoclast ultrastructure. 2095.

Saurat, J.-H. *See* Sappino, A.-P., Belin, D., Huarte, J., Hirschel-Scholz, S., Saurat, J.-H., and Vassalli, J.-D.

Sawdey, M. S., and Loskutoff, D. J. Regulation of murine type 1 plasminogen activator inhibitor gene expression in vivo. Tissue specificity and induction by lipopolysaccharide, tumor necrosis factor-α, and transforming growth factor-β. 1346.

Schafer, A. I. *See* Kroll, M. H., Harris, T. S., Moake, J. L., Handin, R. I., and Schafer, A. I.

Schambelan, M. *See* Grady, E. F., Sechi, L. A., Griffin, C. A., Schambelan, M., and Kalinyak, J. E.

Schechter, A. N. *See* Gupta, A. K., Kirchner, K. A., Nicholson, R., Adams, J. G., III, Schechter, A. N., Noguchi, C. T., and Steinberg, M. H.

Schlender, K. K. *See* Nyomba, B. L., Brautigan, D. L., Schlender, K. K., Wang, W., Bogardus, C., and Mott, D. M.
Schneider, M. D. *See* Black, F. M., Packer, S. E., Parker, T. G., Michael, L. H., Roberts, R., Schwartz, R. J., and Schneider, M. D.
Schrader, D. C. *See* Sands, J. M., and Schrader, D. C.
Schreiber, A. D. *See* Indik, Z., Kelly, C., Chien, P., Levinson, A. I., and Schreiber, A. D.
— *See* Ruiz, P., Gomez, F., King, M., Lopez, R., Darby, C., and Schreiber, A. D.
Schuchman, E. H. *See* Levran, O., Desnick, R. J., and Schuchman, E. H.
Schumm-Draeger, P.-M. *See* Hoermann, R., Schumm-Draeger, P.-M., Rehbach, K., and Mann, K.
Schwartz, E. *See* Rand, J. H., Patel, N. D., Schwartz, E., Zhou, S.-L., and Potter, B. J.
Schwartz, K. *See* Boheler, K. R., Carrier, L., de la Bastie, D., Allen, P. D., Komajda, M., Mercadier, J.-J., and Schwartz, K.
Schwartz, M. W., Bergman, R. N., Kahn, S. E., Taborsky, G. J., Jr., Fisher, L. D., Sipois, A. J., Woods, S. C., Steil, G. M., and Porte, D., Jr. Evidence for entry of plasma insulin into cerebrospinal fluid through an intermediate compartment in dogs. Quantitative aspects and implications for transport. 1272.
Schwartz, R. J. *See* Black, F. M., Packer, S. E., Parker, T. G., Michael, L. H., Roberts, R., Schwartz, R. J., and Schneider, M. D.
Schwartz, S. M. *See* Majesky, M. W., Lindner, V., Twardzik, D. R., Schwartz, S. M., and Reidy, M. A.
Schwenke, D. C. *See* Wagner, J. D., Clarkson, T. B., St. Clair, R. W., Schwenke, D. C., Shively, C. A., and Adams, M. R.
Scott, G. A. *See* Fairley, J. A., Scott, G. A., Jensen, K. D., Goldsmith, L. A., and Diaz, L. A.
Scott, G. K., Kushner, P., Vigne, J.-L., and Benz, C. C. Truncated forms of DNA-binding estrogen receptors in human breast cancer. 700.
Scott, M. G. *See* Lucas, A. H., Langley, R. J., Granoff, D. M., Nahm, M. H., Kitamura, M. Y., and Scott, M. G.
Sechi, L. A. *See* Grady, E. F., Sechi, L. A., Griffin, C. A., Schambelan, M., and Kalinyak, J. E.
Seed, M. *See* Soutar, A. K., McCarthy, S. N., Seed, M., and Knight, B. L.
Seeger, R. C. *See* Hailat, N., Keim, D. R., Melhem, R. F., Zhu, X.-x., Eckerskorn, C., Brodeur, G. M., Reynolds, C. P., Seeger, R. C., Lottspeich, F., Strahler, J. R., and Hanash, S. M.
Seeger, W. *See* Grimminger, F., Sibelius, U., Bhakdi, S., Suttorp, N., and Seeger, W.
Sehayek, E., Lewin-Velvert, U., Chajek-Shaul, T., and Eisenberg, S. Lipolysis exposes unreactive endogenous apolipoprotein E-3 in human and rat plasma very low density lipoprotein. 553.
Sen, S. *See* Mukherjee, D., and Sen, S.
Serre, G. *See* Sié, P., Bezeaud, A., Dupouy, D., Archipoff, G., Freyssinet, J.-M., Dugoujon, J.-M., Serre, G., Guillin, M.-C., and Boneu, B.
Severien, C. *See* Sáez-Llorens, X., Jafari, H. S., Severien, C., Parras, F., Olsen, K. D., Hansen, E. J., Singer, I. I., and McCracken, G. H., Jr.
Shapiro, J. I. *See* Lien, Y.-H. H., Shapiro, J. I., and Chan, L.
Shapiro, L. E. *See* Halperin, Y., Shapiro, L. E., and Surks, M. I.
Sharifi, B. *See* Hongo, T., Kupfer, J., Enomoto, H., Sharifi, B., Giannella-Neto, D., Forrester, J. S., Singer, F. R., Goltzman, D., Hendy, G. N., Pirola, C., Fagin, J. A., and Clemens, T. L.
Sharp, G. W. G. *See* Cohen, M. E., Wesolek, J., McCullen, J., Rys-Sikora, K., Pandol, S., Rood, R. P., Sharp, G. W. G., and Donowitz, M.
Shatsky, M. *See* Levitt, L. J., Nagler, A., Lee, F., Abrams, J., Shatsky, M., and Thompson, D.
Shaul, P. W., Kinane, B., Farrar, M. A., Buja, L. M., and Magness, R. R. Prostacyclin production and mediation of adenylate cyclase activity in the pulmonary artery. Alterations after prolonged hypoxia in the rat. 447.
Shaw, J. H. F. *See* Douglas, R. G., Gluckman, P. D., Ball, K., Breier, B., and Shaw, J. H. F.
Shearer, G. M. *See* Berzofsky, J. A., Pendleton, C. D., Clerici, M., Ahlers, J., Lucey, D. R., Putney, S. D., and Shearer, G. M.
Sheldon, R. S. *See* Taouis, M., Sheldon, R. S., and Duff, H. J.
Shepherd, J. *See* Demant, T., Bedford, D., Packard, C. J., and Shepherd, J.
Sheppard, B. C. *See* Alexander, H. R., Sheppard, B. C., Jensen, J. C., Langstein, H. N., Buresh, C. M., Venzon, D., Walker, E. C., Fraker, D. L., Stovroff, M. C., and Norton, J. A.
Sherman, M. L. *See* Brach, M. A., Hass, R., Sherman, M. L., Gunji, H., Weichselbaum, R., and Kufe, D.
Sherwin, S. *See* Jaffe, H. A., Buhl, R., Mastrangeli, A., Holroyd, K. J., Saltini, C., Czerski, D., Jaffe, H. S., Kramer, S., Sherwin, S., and Crystal, R. G.
Sheth, D. *See* Brown, T. R., Sundick, R. S., Dhar, A., Sheth, D., and Bagchi, N.
Shi, L.-B. *See* Kuwahara, M., Shi, L.-B., Marumo, F., and Verkman, A. S.
Shibata, M. *See* Wakita, T., Kakumu, S., Shibata, M., Yoshioka, K., Ito, Y., Shinagawa, T., Ishikawa, T., Takayanagi, M., and Morishima, T.
Shibuya, T. *See* Akashi, K., Shibuya, T., Harada, M., Takamatsu, Y., Uike, N., Eto, T., and Niho, Y.
Shimada, T., Fujii, H., Mitsuya, H., and Nienhuis, A. W. Targeted and highly efficient gene transfer into $CD4^+$ cells by a recombinant human immunodeficiency virus retroviral vector. 1043.
Shimano, H. *See* Gotoda, T., Yamada, N., Kawamura, M., Kozaki, K., Mori, N., Ishibashi, S., Shimano, H., Takaku, F., Yazaki, Y., Furuichi, Y., and Murase, T.
Shimoda, S.-I. *See* Ieiri, T., Cochaux, P., Targovnik, H. M., Suzuki, M., Shimoda, S.-I., Perret, J., and Vassart, G.
Shinagawa, T. *See* Wakita, T., Kakumu, S., Shibata, M., Yoshioka, K., Ito, Y., Shinagawa, T., Ishikawa, T., Takayanagi, M., and Morishima, T.
Shindo, M. *See* Fong, T.-L., Shindo, M., Feinstone, S. M., Hoofnagle, J. H., and Di Bisceglie, A. M.
Shively, C. A. *See* Wagner, J. D., Clarkson, T. B., St. Clair, R. W., Schwenke, D. C., Shively, C. A., and Adams, M. R.
Shulman, G. I. *See* Moore, M. C., Cherrington, A. D., Cilne, G., Pagliassotti, M. J., Jones, E. M., Neal, D. W., Badet, C., and Shulman, G. I.
Shultz, L. D. *See* Greiner, D. L., Shultz, L. D., Rossini, A. A., Mordes, J. P., Handler, E. S., and Rajan, T. V.
Sibelius, U. *See* Grimminger, F., Sibelius, U., Bhakdi, S., Suttorp, N., and Seeger, W.
Sica, A. *See* Frangi, D., Cicardi, M., Sica, A., Colotta, F., Agostoni, A., and Davis, A. E., III
Sié, P., Bezeaud, A., Dupouy, D., Archipoff, G., Freyssinet, J.-M., Dugoujon, J.-M., Serre, G., Guillin, M.-C., and Boneu, B. An acquired antithrombin autoantibody directed toward the catalytic center of the enzyme. 290.
Sih, S. A. *See* Upadhyaya, G., Guba, S. C., Sih, S. A., Feinberg, A. P., Talpaz, M., Kantarjian, H. M., Deisseroth, A. B., and Emerson, S. G.
Silberstein, D. S. *See* Rand, T. H., Silberstein, D. S., Kornfeld, H., and Weller, P. F.
Silver, J. E. *See* Limaye, A. P., Abrams, J. S., Silver, J. E., Awadzi, K., Francis, H. F., Ottesen, E. A., and Nutman, T. B.
Silverman, G. J., and Lucas, A. H. Variable region diversity in human circulating antibodies specific for the capsular polysaccharide of *Haemophilus influenzae* type b preferential usage of two types of VH3 heavy chains. 911.
Siminovitch, K. A. *See* Olee, T., Yang, P.-M., Siminovitch, K. A., Olsen, N. J., Hillson, J., Wu, J., Kozin, F., Carson, D. A., and Chen, P. P.
Simmons, H. *See* Sato, M., Grasser, W., Endo, N., Akins, R., Simmons, H., Thompson, D. D., Golub, E., and Rodan, G. A.
Simon, S., Awdeh, Z., Campbell, R. D., Ronco, P., II, Brink, S. J., Eisenbarth, G. S., Yunis, E. J., and Alper, C. A. A restriction fragment of the C2 gene is a unique marker for C2 deficiency and the uncommon *C2* allele *C2*B* (a marker for type 1 diabetes). 2142.
Sims, P. J. *See* Hamilton, K. K., and Sims, P. J.
Singer, F. R. *See* Hongo, T., Kupfer, J., Enomoto, H., Sharifi, B., Giannella-Neto, D., Forrester, J. S., Singer, F. R., Goltzman, D., Hendy, G. N., Pirola, C., Fagin, J. A., and Clemens, T. L.
Singer, I. I. *See* Sáez-Llorens, X., Jafari, H. S., Severien, C., Parras, F., Olsen, K. D., Hansen, E. J., Singer, I. I., and McCracken, G. H., Jr.
Singer, M. S. *See* Huang, K., Geoffroy, J. S., Singer, M. S., and Rosen, S. D.
Sipois, A. J. *See* Schwartz, M. W., Bergman, R. N., Kahn, S. E., Ta-

borsky, G. J., Jr., Fisher, L. D., Sipois, A. J., Woods, S. C., Steil, G. M., and Porte, D., Jr.

Skött, P. *See* Vaag, A., Skött, P., Damsbo, P., Gall, M.-A., Richter, E. A., and Beck-Nielsen, H.

Smit, M. J., Temmerman, A. M., Wolters, H., Kuipers, F., Beynen, A. C., and Vonk, R. J. Dietary fish oil–induced changes in intrahepatic cholesterol transport and bile acid synthesis in rats. 943.

Smith, A. E. *See* Berger, H. A., Anderson, M. P., Gregory, R. J., Thompson, S., Howard, P. W., Maurer, R. A., Mulligan, R., Smith, A. E., and Welsh, M. J.

Smith, B. A. *See* Smith, F. G., Smith, B. A., Guillery, E. N., and Robillard, J. E.

Smith, C. *See* Boden, G., Jadali, F., White, J., Liang, Y., Mozzoli, M., Chen, X., Coleman, E., and Smith, C.

Smith, C. J. *See* Movsesian, M. A., Smith, C. J., Krall, J., Bristow, M. R., and Manganiello, V. C.

Smith, C. W., Entman, M. L., Lane, C. L., Beaudet, A. L., Ty, T. I., Youker, K., Hawkins, H. K., and Anderson, D. C. Adherence of neutrophils to canine cardiac myocytes in vitro is dependent on intercellular adhesion molecule-1. 1216.

— *See* Gundel, R. H., Wegner, C. D., Torcellini, C. A., Clarke, C. C., Haynes, N., Rothlein, R., Smith, C. W., and Letts, L. G.

— *See* Mulligan, M. S., Varani, J., Dame, M. K., Lane, C. L., Smith, C. W., Anderson, D. C., and Ward, P. A.

Smith, F. G., Smith, B. A., Guillery, E. N., and Robillard, J. E. Role of renal sympathetic nerves in lambs during the transition from fetal to newborn life. 1988.

Smith, J. S. *See* Pottratz, S. T., Paulsrud, J., Smith, J. S., and Martin, W. J., II

Smith, L. C. *See* Mahoney, S. E., Duvic, M., Nickoloff, B. J., Minshall, M., Smith, L. C., Griffiths, C. E. M., Paddock, S. W., and Lewis, D. E.

Smith, M. R., and Greene, W. C. Type I human T cell leukemia virus tax protein transforms rat fibroblasts through the cyclic adenosine monophosphate response element binding protein/activating transcription factor pathway. 1038.

Smith, U. *See* Svedberg, J., Strömblad, G., Wirth, A., Smith, U., and Björntorp, P.

Snyder, G. B. *See* Reimann, K. A., Snyder, G. B., Chalifoux, L. V., Waite, B. C. D., Miller, M. D., Yamamoto, H., Spertini, O., and Letvin, N. L.

Snyder, L. S., Hertz, M. I., Peterson, M. S., Harmon, K. R., Marinelli, W. A., Henke, C. A., Greenheck, J. R., Chen, B., and Bitterman, P. B. Acute lung injury. Pathogenesis of intraalveolar fibrosis. 663.

Snyder, R. C. *See* Blume, S. W., Snyder, R. C., Ray, R., Thomas, S., Koller, C. A., and Miller, D. M.

Soleimani, M., Lesoine, G. A., Bergman, J. A., and McKinney, T. D. A pH modifier site regulates activity of the Na^+:HCO_3^- cotransporter in basolateral membranes of kidney proximal tubules. 1135.

Solioz, M. *See* Krapf, R., and Solioz, M.

Soloway, R. D. *See* Qiu, S.-M., Wen, G., Hirakawa, N., Soloway, R. D., Hong, N.-K., and Crowther, R. S.

Soutar, A. K., McCarthy, S. N., Seed, M., and Knight, B. L. Relationship between apolipoprotein(a) phenotype, lipoprotein(a) concentration in plasma, and low density lipoprotein receptor function in a large kindred with familial hypercholesterolaemia due to the $pro_{664} \rightarrow$ leu mutation in the LDL receptor gene. 483.

Sowers, J. R. *See* Standley, P. R., Zhang, F., Ram, J. L., Zemel, M. B., and Sowers, J. R.

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Spertini, O. *See* Reimann, K. A., Snyder, G. B., Chalifoux, L. V., Waite, B. C. D., Miller, M. D., Yamamoto, H., Spertini, O., and Letvin, N. L.

Spina, R. J. *See* Martin, W. H., III, Spina, R. J., Korte, E., Yarasheski, K. E., Angelopoulos, T. J., Nemeth, P. M., and Saffitz, J. E.

Spire, J.-P. *See* Van Cauter, E., Blackman, J. D., Roland, D., Spire, J.-P., Refetoff, S., and Polonsky, K. S.

Splawski, J. B., and Lipsky, P. E. Cytokine regulation of immunoglobulin secretion by neonatal lymphocytes. 967.

Sporn, M. B. *See* Horikoshi, S., McCune, B. K., Ray, P. E., Kopp, J. B., Sporn, M. B., and Klotman, P. E.

Sprecher, D. L., Knauer, S. L., Black, D. M., Kaplan, L. A., Akeson, A. A., Dusing, M., Lattier, D., Stein, E. A., Rymaszewski, M., and Wiginton, D. A. Chylomicron-retinyl palmitate clearance in type I hyperlipidemic families. 985.

Stafford, D. W. *See* Watzke, H. H., Wallmark, A., Hamaguchi, N., Giardina, P., Stafford, D. W., and High, K. A.

Stalenhoef, A. F. H. *See* de Knijff, P., Van den Maagdenberg, A. M. J. M., Stalenhoef, A. F. H., Leuven, J. A. G., Demacker, P. N. M., Kuyt, L. P., Frants, R. R., and Havekes, L. M.

Standley, P. R., Zhang, F., Ram, J. L., Zemel, M. B., and Sowers, J. R. Insulin attenuates vasopressin-induced calcium transients and a voltage-dependent calcium response in rat vascular smooth muscle cells. 1230.

Star, R. A. *See* Fisher, C. R., Chuang, J. L., Cox, R. P., Fisher, C. W., Star, R. A., and Chuang, D. T.

St. Clair, R. W. *See* Wagner, J. D., Clarkson, T. B., St. Clair, R. W., Schwenke, D. C., Shively, C. A., and Adams, M. R.

Steel, C. *See* Freedman, D. O., Lujan-Trangay, A., Steel, C., Gonzalez-Peralta, C., and Nutman, T. B.

Steers, W. D., Kolbeck, S., Creedon, D., and Tuttle, J. B. Nerve growth factor in the urinary bladder of the adult regulates neuronal form and function. 1709.

Stegmann, A. P. A. *See* Brooimans, R. A., Stegmann, A. P. A., Van Dorp, W. T., Van der Ark, A. A. J., Van der Woude, F. J., Van Es, L. A., and Daha, M. R.

Steil, G. M. *See* Schwartz, M. W., Bergman, R. N., Kahn, S. E., Taborsky, G. J., Jr., Fisher, L. D., Sipois, A. J., Woods, S. C., Steil, G. M., and Porte, D., Jr.

Stein, E. A. *See* Sprecher, D. L., Knauer, S. L., Black, D. M., Kaplan, L. A., Akeson, A. A., Dusing, M., Lattier, D., Stein, E. A., Rymaszewski, M., and Wiginton, D. A.

Steinberg, D. *See* Witztum, J. L., and Steinberg, D.

Steinberg, M. H. *See* Gupta, A. K., Kirchner, K. A., Nicholson, R., Adams, J. G., III, Schechter, A. N., Noguchi, C. T., and Steinberg, M. H.

Stern, D. *See* Benedict, C. R., Ryan, J., Wolitzky, B., Ramos, R., Gerlach, M., Tijburg, P., and Stern, D.

Stieger, B. *See* Jacquemin, E., Hagenbuch, B., Stieger, B., Wolkoff, A. W., and Meier, P. J.

Stone, R. *See* Kharbanda, S., Nakamura, T., Stone, R., Hass, R., Bernstein, S., Datta, R., Sukhatme, V. P., and Kufe, D.

Stovroff, M. C. *See* Alexander, H. R., Sheppard, B. C., Jensen, J. C., Langstein, H. N., Buresh, C. M., Venzon, D., Walker, E. C., Fraker, D. L., Stovroff, M. C., and Norton, J. A.

Strahler, J. R. *See* Hailat, N., Keim, D. R., Melhem, R. F., Zhu, X.-x., Eckerskorn, C., Brodeur, G. M., Reynolds, C. P., Seeger, R. C., Lottspeich, F., Strahler, J. R., and Hanash, S. M.

Strange, K. *See* Harris, H. W., Jr., Strange, K., and Zeidel, M. L.

Strömblad, G. *See* Svedberg, J., Strömblad, G., Wirth, A., Smith, U., and Björntorp, P.

Sukhatme, V. P. *See* Kharbanda, S., Nakamura, T., Stone, R., Hass, R., Bernstein, S., Datta, R., Sukhatme, V. P., and Kufe, D.

Sullivan, K. F. *See* Manns, M. P., Griffin, K. J., Sullivan, K. F., and Johnson, E. F.

Sundick, R. S. *See* Brown, T. R., Sundick, R. S., Dhar, A., Sheth, D., and Bagchi, N.

Sung, S.-s. J., and Walters, J. A. Increased cyclic AMP levels enhance IL-1α and IL-1β mRNA expression and protein production in human myelomonocytic cell lines and monocytes. 1915.

Surks, M. I. *See* Halperin, Y., Shapiro, L. E., and Surks, M. I.

Suttorp, N. *See* Grimminger, F., Sibelius, U., Bhakdi, S., Suttorp, N., and Seeger, W.

Suzuki, M., Morita, T., Hanaoka, K., Kawaguchi, Y., and Sakai, O. A Cl^- channel activated by parathyroid hormone in rabbit renal proximal tubule cells. 735.

— *See* Ieiri, T., Cochaux, P., Targovnik, H. M., Suzuki, M., Shimoda, S.-I., Perret, J., and Vassart, G.

Svedberg, J., Strömblad, G., Wirth, A., Smith, U., and Björntorp, P. Fatty acids in the portal vein of the rat regulate hepatic insulin clearance. 2054.

Swenson, T. L. *See* Williams, K. J., Petrie, K. A., Brocia, R. W., and Swenson, T. L.

Swinburn, B. A., Nyomba, B. L., Saad, M. F., Zurlo, F., Raz, I., Knowler, W. C., Lillioja, S., Bogardus, C., and Ravussin, E. Insulin resistance associated with lower rates of weight gain in Pima indians. 168.

Sylvester, J. T. *See* Wiener, C. M., Dunn, A., and Sylvester, J. T.

Sztalryd, C., Azhar, S., and Reaven, G. M. Differences in insulin action as a function of original anatomical site of newly differentiated adipocytes obtained in primary culture. 1629.

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Tabei, K. *See* Ando, Y., Tabei, K., and Asano, Y.

Taborsky, G. J., Jr. *See* Greenbaum, C. J., Havel, P. J., Taborsky, G. J., Jr., and Klaff, L. J.

— *See* Schwartz, M. W., Bergman, R. N., Kahn, S. E., Taborsky, G. J., Jr., Fisher, L. D., Sipois, A. J., Woods, S. C., Steil, G. M., and Porte, D., Jr.

Taga, T. *See* Fujihashi, K., McGhee, J. R., Lue, C., Beagley, K. W., Taga, T., Hirano, T., Kishimoto, T., Mestecky, J., and Kiyono, H.

Takaku, F. *See* Gotoda, T., Yamada, N., Kawamura, M., Kozaki, K., Mori, N., Ishibashi, S., Shimano, H., Takaku, F., Yazaki, Y., Furuichi, Y., and Murase, T.

Takamatsu, Y. *See* Akashi, K., Shibuya, T., Harada, M., Takamatsu, Y., Uike, N., Eto, T., and Niho, Y.

Takasaki, I. *See* Saouaf, R., Takasaki, I., Eastman, E., Chobanian, A. V., and Brecher, P.

Takayanagi, M. *See* Wakita, T., Kakumu, S., Shibata, M., Yoshioka, K., Ito, Y., Shinagawa, T., Ishikawa, T., Takayanagi, M., and Morishima, T.

Takeishi, T., Martin, T. R., Katona, I. M., Finkelman, F. D., and Galli, S. J. Differences in the expression of the cardiopulmonary alterations associated with anti-immunoglobulin E-induced or active anaphylaxis in mast cell–deficient and normal mice. Mast cells are not required for the cardiopulmonary changes associated with certain fatal anaphylactic responses. 598.

Talpaz, M. *See* Upadhyaya, G., Guba, S. C., Sih, S. A., Feinberg, A. P., Talpaz, M., Kantarjian, H. M., Deisseroth, A. B., and Emerson, S. G.

Tan, Z. *See* Fisher, A. B., Dodia, C., Tan, Z., Ayene, I., and Eckenhoff, R. G.

Tanner, J., and Tosato, G. Impairment of natural killer functions by interleukin 6 increases lymphoblastoid cell tumorigenicity in athymic mice. 239.

Taouis, M., Sheldon, R. S., and Duff, H. J. Upregulation of the rat cardiac sodium channel by in vivo treatment with a class I antiarrhythmic drug. 375.

Targovnik, H. M. *See* Ieiri, T., Cochaux, P., Targovnik, H. M., Suzuki, M., Shimoda, S.-I., Perret, J., and Vassart, G.

Tatake, R. *See* Maio, M., Altomonte, M., Tatake, R., Zeff, R. A., and Ferrone, S.

Temmerman, A. M. *See* Smit, M. J., Temmerman, A. M., Wolters, H., Kuipers, F., Beynen, A. C., and Vonk, R. J.

ten Cate, J. W. *See* Levi, M., Hack, C. E., de Boer, J. P., Brandjes, D. P. M., Büller, H. R., and ten Cate, J. W.

Tessari, P., Inchiostro, S., Biolo, G., Vincenti, E., and Sabadin, L. Effects of acute systemic hyperinsulinemia on forearm muscle proteolysis in healthy man. 27.

Thacker, J. D. *See* Otsuka, T., Thacker, J. D., Eaves, C. J., and Hogge, D. E.

Theoharides, T. C. *See* Pothoulakis, C., LaMont, J. T., Eglow, R., Gao, N., Rubins, J. B., Theoharides, T. C., and Dickey, B. F.

Thiéry, J.-P. *See* Samuel, J. L., Barrieux, A., Dufour, S., Dubus, I., Contard, F., Koteliansky, V., Farhadian, F., Marotte, F., Thiéry, J.-P., and Rappaport, L.

Thomas, D. D. *See* Šadžienė, A., Thomas, D. D., Bundoc, V. G., Holt, S. C., and Barbour, A. G.

Thomas, S. *See* Blume, S. W., Snyder, R. C., Ray, R., Thomas, S., Koller, C. A., and Miller, D. M.

Thompson, D. *See* Levitt, L. J., Nagler, A., Lee, F., Abrams, J., Shatsky, M., and Thompson, D.

Thompson, D. D. *See* Sato, M., Grasser, W., Endo, N., Akins, R., Simmons, H., Thompson, D. D., Golub, E., and Rodan, G. A.

Thompson, S. *See* Berger, H. A., Anderson, M. P., Gregory, R. J., Thompson, S., Howard, P. W., Maurer, R. A., Mulligan, R., Smith, A. E., and Welsh, M. J.

Thorens, B. *See* Zhang, R., Alper, S. L., Thorens, B., and Verkman, A. S.

Thuillier, P. *See* Haller, R. G., Henriksson, K. G., Jorfeldt, L., Hultman, E., Wibom, R., Sahlin, K., Areskog, N.-H., Gunder, M., Ayyad, K., Blomqvist, C. G., Hall, R. E., Thuillier, P., Kennaway, N. G., and Lewis, S. F.

Thysell, H. *See* Lantz, M., Thysell, H., Nilsson, E., and Olsson, I.

Ticknor, C. M. *See* Radovick, S., Ticknor, C. M., Nakayama, Y., Notides, A. C., Rahman, A., Weintraub, B. D., Cutler, G. B., Jr., and Wondisford, F. E.

Tijburg, P. *See* Benedict, C. R., Ryan, J., Wolitzky, B., Ramos, R., Gerlach, M., Tijburg, P., and Stern, D.

Todd, R. F., III. *See* Krauss, J. C., Mayo-Bond, L. A., Rogers, C. E., Weber, K. L., Todd, R. F., III, and Wilson, J. M.

Tong-Starksen, S. E. *See* Bernstein, M. S., Tong-Starksen, S. E., and Locksley, R. M.

Tonsgard, J. H. *See* Kundu, R. K., Tonsgard, J. H., and Getz, G. S.

Torcellini, C. A. *See* Gundel, R. H., Wegner, C. D., Torcellini, C. A., Clarke, C. C., Haynes, N., Rothlein, R., Smith, C. W., and Letts, L. G.

Toribara, N. W., Gum, J. R., Jr., Culhane, P. J., Lagace, R. E., Hicks, J. W., Petersen, G. M., and Kim, Y. S. MUC-2 human small intestinal mucin gene structure. Repeated arrays and polymorphism. 1005.

Tosato, G. *See* Tanner, J., and Tosato, G.

Trapnell, B. C. *See* Hamosh, A., Trapnell, B. C., Zeitlin, P. L., Montrose-Rafizadeh, C., Rosenstein, B. J., Crystal, R. G., and Cutting, G. R.

Trigg, D. *See* Bastani, B., Purcell, H., Hemken, P., Trigg, D., and Gluck, S.

Trimarco, B. *See* Volpe, M., Tritto, C., de Luca, N., Mele, A. F., Lembo, G., Rubattu, S., Romano, M., de Campora, P., Enea, I., Ricciardelli, B., Trimarco, B., and Condorelli, M.

Tritto, C. *See* Volpe, M., Tritto, C., de Luca, N., Mele, A. F., Lembo, G., Rubattu, S., Romano, M., de Campora, P., Enea, I., Ricciardelli, B., Trimarco, B., and Condorelli, M.

Tromp, G. *See* Kuivaniemi, H., Tromp, G., and Prockop, D. J.

Tsao, P. S. *See* Ma, X.-L., Tsao, P. S., and Lefer, A. M.

Tsapis, A. *See* Levy, Y., Tsapis, A., and Brouet, J.-C.

Tse, W. T. *See* Garbarz, M., Tse, W. T., Gallagher, P. G., Picat, C., Lecomte, M.-C., Galibert, F., Dhermy, D., and Forget, B. G.

Tulenko, T. N. *See* Bialecki, R. A., Tulenko, T. N., and Colucci, W. S.

Turk, E. *See* Wright, E. M., Turk, E., Zabel, B., Mundlos, S., and Dyer, J.

Tutois, S., Montagutelli, X., Da Silva, V., Jouault, H., Rouyer-Fessard, P., Leroy-Viard, K., Guénet, J.-L., Nordmann, Y., Beuzard, Y., and Deybach, J.-C. Erythropoietic protoporphyria in the house mouse. A recessive inherited ferrochelatase deficiency with anemia, photosensitivity, and liver disease. 1730.

Tuttle, J. B. *See* Steers, W. D., Kolbeck, S., Creedon, D., and Tuttle, J. B.

Twardzik, D. R. *See* Majesky, M. W., Lindner, V., Twardzik, D. R., Schwartz, S. M., and Reidy, M. A.

Ty, T. I. *See* Smith, C. W., Entman, M. L., Lane, C. L., Beaudet, A. L., Ty, T. I., Youker, K., Hawkins, H. K., and Anderson, D. C.

U

Uchida, S., Nakanishi, T., Kwon, H. M., Preston, A. S., and Handler, J. S. Taurine behaves as an osmolyte in Madin-Darby canine kidney cells. Protection by polarized, regulated transport of taurine. 656.

Uike, N. *See* Akashi, K., Shibuya, T., Harada, M., Takamatsu, Y., Uike, N., Eto, T., and Niho, Y.

Ullman, H. L. *See* Marcus, A. J., Safier, L. B., Hajjar, K. A., Ullman, H. L., Islam, N., Broekman, M. J., and Eiroa, A. M.

Unemori, E. N., Hibbs, M. S., and Amento, E. P. Constitutive expression of a 92-kD gelatinase (type V collagenase) by rheumatoid synovial fibroblasts and its induction in normal human fibroblasts by inflammatory cytokines. 1656.

Unwin, R. *See* Capasso, G., Unwin, R., Agulian, S., and Giebisch, G.

Upadhyaya, G., Guba, S. C., Sih, S. A., Feinberg, A. P., Talpaz, M., Kantarjian, H. M., Deisseroth, A. B., and Emerson, S. G. Interferon-alpha restores the deficient expression of the cytoadhesion molecule lymphocyte function antigen-3 by chronic myelogenous leukemia progenitor cells. 2131.

V

Vaag, A., Skött, P., Damsbo, P., Gall, M.-A., Richter, E. A., and Beck-Nielsen, H. Effect of the antilipolytic nicotinic acid analogue acipimox on whole-body and skeletal muscle glucose metabolism in patients with non–insulin-dependent diabetes mellitus. 1282.

Vainchenker, W. *See* Mitjavila, M.-T., Le Couedic, J.-P., Casadevall, N., Navarro, S., Villeval, J.-L., Dubart, A., and Vainchenker, W.
Valente, A. J. *See* Darbonne, W. C., Rice, G. C., Mohler, M. A., Apple, T., Hébert, C. A., Valente, A. J., and Baker, J. B.
— *See* Navab, M., Imes, S. S., Hama, S. Y., Hough, G. P., Ross, L. A., Bork, R. W., Valente, A. J., Berliner, J. A., Drinkwater, D. C., Laks, H., and Fogelman, A. M.
Vallari, D. S. *See* Allain, J.-P., Dailey, S. H., Laurian, Y., Vallari, D. S., Rafowicz, A., Desai, S. M., and Devare, S. G.
Valli, A. *See* Ferrari, C., Bertoletti, A., Penna, A., Cavalli, A., Valli, A., Missale, G., Pilli, M., Fowler, P., Giuberti, T., Chisari, F. V., and Fiaccadori, F.
Van Cauter, E., Blackman, J. D., Roland, D., Spire, J.-P., Refetoff, S., and Polonsky, K. S. Modulation of glucose regulation and insulin secretion by circadian rhythmicity and sleep. 934.
Van den Maagdenberg, A. M. J. M. *See* de Knijff, P., Van den Maagdenberg, A. M. J. M., Stalenhoef, A. F. H., Leuven, J. A. G., Demacker, P. N. M., Kuyt, L. P., Frants, R. R., and Havekes, L. M.
Van der Ark, A. A. J. *See* Brooimans, R. A., Stegmann, A. P. A., Van Dorp, W. T., Van der Ark, A. A. J., Van der Woude, F. J., Van Es, L. A., and Daha, M. R.
Van der Woude, F. J. *See* Brooimans, R. A., Stegmann, A. P. A., Van Dorp, W. T., Van der Ark, A. A. J., Van der Woude, F. J., Van Es, L. A., and Daha, M. R.
Van Dorp, W. T. *See* Brooimans, R. A., Stegmann, A. P. A., Van Dorp, W. T., Van der Ark, A. A. J., Van der Woude, F. J., Van Es, L. A., and Daha, M. R.
Van Es, L. A. *See* Brooimans, R. A., Stegmann, A. P. A., Van Dorp, W. T., Van der Ark, A. A. J., Van der Woude, F. J., Van Es, L. A., and Daha, M. R.
Varani, J. *See* Mulligan, M. S., Varani, J., Dame, M. K., Lane, C. L., Smith, C. W., Anderson, D. C., and Ward, P. A.
Vassalli, J.-D., Sappino, A.-P., and Belin, D. The plasminogen activator/plasmin system. 1067.
— *See* Sappino, A.-P., Belin, D., Huarte, J., Hirschel-Scholz, S., Saurat, J.-H., and Vassalli, J.-D.
Vassart, G. *See* Ieiri, T., Cochaux, P., Targovnik, H. M., Suzuki, M., Shimoda, S.-I., Perret, J., and Vassart, G.
Venzon, D. *See* Alexander, H. R., Sheppard, B. C., Jensen, J. C., Langstein, H. N., Buresh, C. M., Venzon, D., Walker, E. C., Fraker, D. L., Stovroff, M. C., and Norton, J. A.
Verdonk, E. D. *See* Wickline, S. A., Verdonk, E. D., and Miller, J. G.
Vergelli, M. *See* Massacesi, L., Castigli, E., Vergelli, M., Olivotto, J., Abbamondi, A. L., Sarlo, F., and Amaducci, L.
Verkman, A. S. *See* Kuwahara, M., Shi, L.-B., Marumo, F., and Verkman, A. S.
— *See* Zhang, R., Alper, S. L., Thorens, B., and Verkman, A. S.
Verma, U. S. *See* Kusari, J., Verma, U. S., Buse, J. B., Henry, R. R., and Olefsky, J. M.
Victor, G. H. *See* Opal, S. M., Cross, A. S., Sadoff, J. C., Collins, H. H., Kelly, N. M., Victor, G. H., Palardy, J. E., and Bodmer, M. W.
Vigne, J.-L. *See* Scott, G. K., Kushner, P., Vigne, J.-L., and Benz, C. C.
Villeval, J.-L. *See* Mitjavila, M.-T., Le Couedic, J.-P., Casadevall, N., Navarro, S., Villeval, J.-L., Dubart, A., and Vainchenker, W.
Villiger, P. M. *See* Kuis, W., Villiger, P. M., Leser, H.-G., and Lotz, M.
Vincenti, E. *See* Tessari, P., Inchiostro, S., Biolo, G., Vincenti, E., and Sabadin, L.
Vogt, B. *See* Roesler, J., Hockertz, S., Vogt, B., and Lohmann-Matthes, M.-L.
Volpe, M., Tritto, C., de Luca, N., Mele, A. F., Lembo, G., Rubattu, S., Romano, M., de Campora, P., Enea, I., Ricciardelli, B., Trimarco, B., and Condorelli, M. Failure of atrial natriuretic factor to increase with saline load in patients with dilated cardiomyopathy and mild heart failure. 1481.
Vonk, R. J. *See* Smit, M. J., Temmerman, A. M., Wolters, H., Kuipers, F., Beynen, A. C., and Vonk, R. J.

W

Wadsworth, H. L. *See* Nagayama, Y., Wadsworth, H. L., Russo, D., Chazenbalk, G. D., and Rapoport, B.
Wagner, J. D., Clarkson, T. B., St. Clair, R. W., Schwenke, D. C., Shively, C. A., and Adams, M. R. Estrogen and progesterone replacement therapy reduces low density lipoprotein accumulation in the coronary arteries of surgically postmenopausal cynomolgus monkeys. 1995.
Waite, B. C. D. *See* Reimann, K. A., Snyder, G. B., Chalifoux, L. V., Waite, B. C. D., Miller, M. D., Yamamoto, H., Spertini, O., and Letvin, N. L.
Wakita, T., Kakumu, S., Shibata, M., Yoshioka, K., Ito, Y., Shinagawa, T., Ishikawa, T., Takayanagi, M., and Morishima, T. Detection of pre-C and core region mutants of hepatitis B virus in chronic hepatitis B virus carriers. 1793.
Waldenström, A., Martinussen, H. J., Gerdin, B., and Hällgren, R. Accumulation of hyaluronan and tissue edema in experimental myocardial infarction. 1622.
Walker, E. C. *See* Alexander, H. R., Sheppard, B. C., Jensen, J. C., Langstein, H. N., Buresh, C. M., Venzon, D., Walker, E. C., Fraker, D. L., Stovroff, M. C., and Norton, J. A.
Wallmark, A. *See* Watzke, H. H., Wallmark, A., Hamaguchi, N., Giardina, P., Stafford, D. W., and High, K. A.
Walters, J. A. *See* Sung, S.-s J., and Walters, J. A.
Wang, A. M. *See* Kanzaki, T., Wang, A. M., and Desnick, R. J.
Wang, W. *See* Nyomba, B. L., Brautigan, D. L., Schlender, K. K., Wang, W., Bogardus, C., and Mott, D. M.
Ward, P. A. *See* Mulligan, M. S., Varani, J., Dame, M. K., Lane, C. L., Smith, C. W., Anderson, D. C., and Ward, P. A.
Wardell, M. R. *See* Linton, M. F., Gish, R., Hubl, S. T., Bütler, E., Esquivel, C., Bry, W. I., Boyles, J. K., Wardell, M. R., and Young, S. G.
Warnock, M. L. *See* Curtis, J. L., Byrd, P. K., Warnock, M. L., and Kaltreider, H. B.
Watzke, H. H., Wallmark, A., Hamaguchi, N., Giardina, P., Stafford, D. W., and High, K. A. Factor $X_{Santo\ Domingo}$. Evidence that the severe clinical phenotype arises from a mutation blocking secretion. 1685.
Weber, K. L. *See* Krauss, J. C., Mayo-Bond, L. A., Rogers, C. E., Weber, K. L., Todd, R. F., III, and Wilson, J. M.
Wegner, C. D. *See* Gundel, R. H., Wegner, C. D., Torcellini, C. A., Clarke, C. C., Haynes, N., Rothlein, R., Smith, C. W., and Letts, L. G.
Weichselbaum, R. *See* Brach, M. A., Hass, R., Sherman, M. L., Gunji, H., Weichselbaum, R., and Kufe, D.
Weil, G. J. *See* Chandrashekar, R., Masood, K., Alvarez, R. M., Ogunrinade, A. F., Lujan, R., Richards, F. O., Jr., and Weil, G. J.
Weiner, M. W. *See* Minotti, J. R., Christoph, I., Oka, R., Weiner, M. W., Wells, L., and Massie, B. M.
Weintraub, B. D. *See* Parrilla, R., Mixson, A. J., McPherson, J. A., McClaskey, J. H., and Weintraub, B. D.
— *See* Radovick, S., Ticknor, C. M., Nakayama, Y., Notides, A. C., Rahman, A., Weintraub, B. D., Cutler, G. B., Jr., and Wondisford, F. E.
Weiss, J. N. *See* Liu, E., Goldhaber, J. I., and Weiss, J. N.
Weller, P. F. *See* Rand, T. H., Silberstein, D. S., Kornfeld, H., and Weller, P. F.
Wells, L. *See* Minotti, J. R., Christoph, I., Oka, R., Weiner, M. W., Wells, L., and Massie, B. M.
Welsh, M. J. *See* Berger, H. A., Anderson, M. P., Gregory, R. J., Thompson, S., Howard, P. W., Maurer, R. A., Mulligan, R., Smith, A. E., and Welsh, M. J.
Wen, G. *See* Qiu, S.-M., Wen, G., Hirakawa, N., Soloway, R. D., Hong, N.-K., and Crowther, R. S.
Wesolek, J. *See* Cohen, M. E., Wesolek, J., McCullen, J., Rys-Sikora, K., Pandol, S., Rood, R. P., Sharp, G. W. G., and Donowitz, M.
Westcott, J. Y. *See* Pelayo, J. C., and Westcott, J. Y.
White, J. *See* Boden, G., Jadali, F., White, J., Liang, Y., Mozzoli, M., Chen, X., Coleman, E., and Smith, C.
Whitsett, J. A. *See* Gregory, T. J., Longmore, W. J., Moxley, M. A., Whitsett, J. A., Reed, C. R., Fowler, A. A., III, Hudson, L. D., Maunder, R. J., Crim, C., and Hyers, T. M.
Wibom, R. *See* Haller, R. G., Henriksson, K. G., Jorfeldt, L., Hultman, E., Wibom, R., Sahlin, K., Areskog, N.-H., Gunder, M., Ayyad, K., Blomqvist, C. G., Hall, R. E., Thuillier, P., Kennaway, N. G., and Lewis, S. F.

Wick, M. *See* Henke, C., Fiegel, V., Peterson, M., Wick, M., Knighton, D., McCarthy, J., and Bitterman, P.

Wickline, S. A., Verdonk, E. D., and Miller, J. G. Three-dimensional characterization of human ventricular myofiber architecture by ultrasonic backscatter. 438.

Wiener, C. M., Dunn, A., and Sylvester, J. T. ATP-dependent K^+ channels modulate vasoconstrictor responses to severe hypoxia in isolated ferret lungs. 500.

Wiener-Kronish, J. P., Albertine, K. H., and Matthay, M. A. Differential responses of the endothelial and epithelial barriers of the lung in sheep to *Escherichia coli* endotoxin. 864.

Wiginton, D. A. *See* Sprecher, D. L., Knauer, S. L., Black, D. M., Kaplan, L. A., Akeson, A. A., Dusing, M., Lattier, D., Stein, E. A., Rymaszewski, M., and Wiginton, D. A.

Wilcox, J. N. *See* Nelken, N. A., Coughlin, S. R., Gordon, D., and Wilcox, J. N.

Williams, G. W. *See* Myers, B. D., Nelson, R. G., Williams, G. W., Bennett, P. H., Hardy, S. A., Berg, R. L., Loon, N., Knowler, W. C., and Mitch, W. E.

Williams, K. J., Petrie, K. A., Brocia, R. W., and Swenson, T. L. Lipoprotein lipase modulates net secretory output of apolipoprotein B in vitro. A possible pathophysiologic explanation for familial combined hyperlipidemia. 1300.

Wilson, J. M. *See* Krauss, J. C., Mayo-Bond, L. A., Rogers, C. E., Weber, K. L., Todd, R. F., III, and Wilson, J. M.

Wilson, M. E. *See* Zarley, J. H., Britigan, B. E., and Wilson, M. E.

Winslow, J. M. *See* Ryan, D. H., Nuccie, B. L., Abboud, C. N., and Winslow, J. M.

Wirth, A. *See* Svedberg, J., Strömblad, G., Wirth, A., Smith, U., and Björntorp, P.

Witztum, J. L., and Steinberg, D. Role of oxidized low density lipoprotein in atherogenesis. 1785.

Wolitzky, B. *See* Benedict, C. R., Ryan, J., Wolitzky, B., Ramos, R., Gerlach, M., Tijburg, P., and Stern, D.

Wolkoff, A. W. *See* Jacquemin, E., Hagenbuch, B., Stieger, B., Wolkoff, A. W., and Meier, P. J.

Wollish, W. S. *See* Rosenthal, P. J., Wollish, W. S., Palmer, J. T., and Rasnick, D.

Wolters, H. *See* Smit, M. J., Temmerman, A. M., Wolters, H., Kuipers, F., Beynen, A. C., and Vonk, R. J.

Wondisford, F. E. *See* Radovick, S., Ticknor, C. M., Nakayama, Y., Notides, A. C., Rahman, A., Weintraub, B. D., Cutler, G. B., Jr., and Wondisford, F. E.

Woods, S. C. *See* Schwartz, M. W., Bergman, R. N., Kahn, S. E., Taborsky, G. J., Jr., Fisher, L. D., Sipois, A. J., Woods, S. C., Steil, G. M., and Porte, D., Jr.

Wright, D. G. *See* Cross, A. S., and Wright, D. G.

Wright, E. M., Turk, E., Zabel, B., Mundlos, S., and Dyer, J. Molecular genetics of intestinal glucose transport. 1435.

Wright, P. F. *See* Graham, B. S., Bunton, L. A., Wright, P. F., and Karzon, D. T.

Wu, D.-A., and Chung, B. Mutations of P450c21 (steroid 21-hydroxylase) at Cys^{428}, Val^{281}, and Ser^{268} result in complete, partial, or no loss of enzymatic activity, respectively. 519.

Wu, J. *See* Olee, T., Yang, P.-M., Siminovitch, K. A., Olsen, N. J., Hillson, J., Wu, J., Kozin, F., Carson, D. A., and Chen, P. P.

X

Xie, M., Jacobs, L. S., and Dubyak, G. R. Regulation of phospholipase D and primary granule secretion by P_2-purinergic- and chemotactic peptide-receptor agonists is induced during granulocytic differentiation of HL-60 cells. 45.

Y

Yamada, N. *See* Gotoda, T., Yamada, N., Kawamura, M., Kozaki, K., Mori, N., Ishibashi, S., Shimano, H., Takaku, F., Yazaki, Y., Furuichi, Y., and Murase, T.

Yamamoto, H. *See* Reimann, K. A., Snyder, G. B., Chalifoux, L. V., Waite, B. C. D., Miller, M. D., Yamamoto, H., Spertini, O., and Letvin, N. L.

Yamamoto, K. *See* Kitajima, I., Yamamoto, K., Sato, K., Nakajima, Y., Nakajima, T., Maruyama, I., Osame, M., and Nishioka, K.

Yandrasitz, J. R. *See* Rosenberg, S. M., Berry, G. T., Yandrasitz, J. R., and Grunstein, M. M.

Yang, P.-M. *See* Olee, T., Yang, P.-M., Siminovitch, K. A., Olsen, N. J., Hillson, J., Wu, J., Kozin, F., Carson, D. A., and Chen, P. P.

Yarasheski, K. E. *See* Martin, W. H., III, Spina, R. J., Korte, E., Yarasheski, K. E., Angelopoulos, T. J., Nemeth, P. M., and Saffitz, J. E.

Yazaki, Y. *See* Gotoda, T., Yamada, N., Kawamura, M., Kozaki, K., Mori, N., Ishibashi, S., Shimano, H., Takaku, F., Yazaki, Y., Furuichi, Y., and Murase, T.

Yen, F. T. *See* Mann, C. J., Yen, F. T., Grant, A. M., and Bihain, B. E.

Yoshioka, K. *See* Wakita, T., Kakumu, S., Shibata, M., Yoshioka, K., Ito, Y., Shinagawa, T., Ishikawa, T., Takayanagi, M., and Morishima, T.

Youker, K. *See* Smith, C. W., Entman, M. L., Lane, C. L., Beaudet, A. L., Ty, T. I., Youker, K., Hawkins, H. K., and Anderson, D. C.

Young, S. G. *See* Linton, M. F., Gish, R., Hubl, S. T., Bütler, E., Esquivel, C., Bry, W. I., Boyles, J. K., Wardell, M. R., and Young, S. G.

Yunis, E. J. *See* Simon, S., Awdeh, Z., Campbell, R. D., Ronco, P., II, Brink, S. J., Eisenbarth, G. S., Yunis, E. J., and Alper, C. A.

Z

Zabel, B. *See* Wright, E. M., Turk, E., Zabel, B., Mundlos, S., and Dyer, J.

Zacchi, T. *See* Dobrina, A., Menegazzi, R., Carlos, T. M., Nardon, E., Cramer, R., Zacchi, T., Harlen, J. M., and Patriarca, P.

Zarley, J. H., Britigan, B. E., and Wilson, M. E. Hydrogen peroxide–mediated toxicity for *Leishmania donovani chagasi* promastigotes. Role of hydroxyl radical and protection by heat shock. 1511.

Zeff, R. A. *See* Maio, M., Altomonte, M., Tatake, R., Zeff, R. A., and Ferrone, S.

Zeidel, M. L. *See* Harris, H. W., Jr., Strange, K., and Zeidel, M. L.

Zeitlin, P. L. *See* Hamosh, A., Trapnell, B. C., Zeitlin, P. L., Montrose-Rafizadeh, C., Rosenstein, B. J., Crystal, R. G., and Cutting, G. R.

Zemel, M. B. *See* Standley, P. R., Zhang, F., Ram, J. L., Zemel, M. B., and Sowers, J. R.

Zhang, F. *See* Standley, P. R., Zhang, F., Ram, J. L., Zemel, M. B., and Sowers, J. R.

Zhang, R., Alper, S. L., Thorens, B., and Verkman, A. S. Evidence from oocyte expression that the erythrocyte water channel is distinct from band 3 and the glucose transporter. 1553.

Zhang, Y., Ramos, B. F., and Jakschik, B. A. Augmentation of reverse arthus reaction by mast cells in mice. 841.

Zhou, S.-L. *See* Rand, J. H., Patel, N. D., Schwartz, E., Zhou, S.-L., and Potter, B. J.

Zhu, X.-x. *See* Hailat, N., Keim, D. R., Melhem, R. F., Zhu, X.-x., Eckerskorn, C., Brodeur, G. M., Reynolds, C. P., Seeger, R. C., Lottspeich, F., Strahler, J. R., and Hanash, S. M.

Zurlo, F. *See* Swinburn, B. A., Nyomba, B. L., Saad, M. F., Zurlo, F., Raz, I., Knowler, W. C., Lillioja, S., Bogardus, C., and Ravussin, E.

Zweier, J. L. *See* Corretti, M. C., Koretsune, Y., Kusuoka, H., Chacko, V. P., Zweier, J. L., and Marban, E.